

# Expert Evaluation of AI Generated Medical Diagnosis

Dermnet Images and use Cases and GPT-4V Model employed for analysis. GPT-4V is provided with image and question. The evaluation has been automatically done on Dermnet(question+Explanation) vs GPT-4V response(Reasoning+Diagnosis).

The respondent's email ([evinikita@gmail.com](mailto:evinikita@gmail.com)) was recorded on submission of this form.

## Question Dermnet

**question:** A 3-year-old boy presented with multiple pigmented skin lesions on his trunk. The initial lesion started on his left knee at 6 months of age. The lesions became more erythematous on hot days or in warm temperature environments, and were otherwise asymptomatic.

On examination, he had multiple yellow-brown flat macules scattered over the trunk and limbs which become more inflamed on scratching.

**Diagnoses and explanation:** Urticaria pigmentosa, also known as maculopapular cutaneous mastocytosis, is due to abnormal collection of mast cells in the skin causing brown patches and freckles. It is the commonest type of cutaneous mastocytosis.

It commonly affects infants, with first patches appearing at a few months of age. In young children, it is common for the patches to blister when rubbed.

## AI generated Response

Diagnosis: Urticaria Pigmentosa (Mastocytosis)

Clinical Features Supporting the Diagnosis:

The history and presentation are strongly suggestive of Urticaria Pigmentosa, which is a form of cutaneous mastocytosis more commonly seen in children. The clinical features include:

- Multiple yellow-brown flat macules (pigmented skin lesions), which are characteristic of Urticaria Pigmentosa.
- Onset in early childhood, with an initial lesion appearing at 6 months of age, which fits the typical pattern for this condition as it commonly begins in infancy or early childhood.
- Lesions that become more erythematous and inflamed when the child is exposed to heat or when the lesions are scratched. This reaction is known as Darier's sign and is indicative of mast cell degranulation.
- Overall asymptomatic nature of the lesions, which is consistent with Urticaria Pigmentosa, as the lesions are not usually painful or itchy unless irritated.

The image shows numerous, small, well-defined macules that vary in color from yellow to brown, which are spread across the trunk, further supporting the diagnosis. The absence of other systemic symptoms is typical in Urticaria Pigmentosa, especially when seen in children, as systemic involvement is less common than in adults.



3-year-old-with-pigmented-lesions-on-trunk\_\_ResizedImageWzc50Cw0NDId.jpg

Done

### AI Symptom analysis and Image understanding \*

1 2 3 4 5

Weak      Great

### AI Diagnostic Reasoning \*

1 2 3 4 5

Weak      Great

### Question Dermnet

**question:** This 40-year-old woman has a longstanding history of crusted skin lesions since she was 12 years old. Lesions started on her neck, axillae, and upper back. They flare up intermittently with increasing pain and malodorous discharge.

Many family members (including her grandfather, father, uncles, and twin sister) have similar lesions.

On examination, she had confluent, crusted, greasy papules across the upper back, lateral neck, and axillae. She also had nail changes.

**Diagnoses and explanation:** Darier disease, an autosomal dominant genodermatosis. It typically presents with scaly, crusted papules in a seborrhoeic distribution and in skin folds.

It is caused by a mutation in the ATP2A2 gene, which leads to SERCA2 protein dysfunction, interfering with cellular calcium signaling. This results in impaired cellular adhesion and epidermal blistering.

## AI generated Response

Diagnosis: Darier Disease (Keratosis Follicularis)

Clinical Features Supporting Diagnosis:

The patient presents with several key features that indicate Darier Disease:

1. Longstanding History: The patient has experienced these skin lesions since a young age, which is common for genetic disorders like Darier Disease.
2. Family History: There is a strong familial pattern, with multiple generations affected, which supports a genetic etiology like that of Darier Disease, an autosomal dominant condition.
3. Morphology and Distribution of Lesions: The greasy papules and crusted lesions are typically seen in Darier Disease, and the distribution on the upper back, lateral neck, and axillae fits the pattern of seborrheic areas commonly involved in this condition.
4. Nail Changes: Nail abnormalities such as red and white streaks or a V-shaped nick at the tip of the nails, are characteristic findings in Darier Disease.
5. Malodorous Discharge and Pain: Secondary infection can be common in these lesions, leading to a malodorous discharge and pain, especially during flares.

The presented photograph shows confluent, crusted, greasy papules that are consistent with the features of Darier Disease lesions.



Done

### AI Symptom analysis and Image understanding \*

	1	2	3	4	5	
Weak	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	Great

### AI Diagnostic Reasoning \*

	1	2	3	4	5	
Weak	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	Great

Question **Dermnet**

**question:**The patient is a 13-year-old male who presents with redness on both cheeks for 13 months.

The facial flush is more pronounced with psychological stress. Physical examination shows bilateral pink erythematous base with raised scaly 'spike-like' lesions on the cheeks.

**Diagnoses and explanation:** The diagnosis is keratosis pilaris rubra. This condition is a variant of keratosis pilaris, and there are often typical lesions of keratosis pilaris on the upper arms and thighs. There may also be discernible pigmentation as well as redness on the cheeks, and it may extend onto the neck (often referred to as erythromelanosus faciei et colli).

It is easier to discern in pale skin individuals. It is often associated with atopic eczema and ichthyosis vulgaris.

## AI generated Response

Diagnosis: Keratosis Pilaris Rubra Faceii (KPRF)

Clinical Features Supporting Diagnosis:

The image and patient history provide several clues that support a diagnosis of Keratosis Pilaris Rubra Faceii (KPRF). KPRF is a variant of keratosis pilaris, which is characterized by rough, small, acne-like bumps that are often red in color, particularly as seen on the cheeks. The key features include:

1. Bilateral pink erythematous base on the cheeks: The redness on both cheeks is consistent with the erythema that is often seen in KPRF.
2. Raised scaly 'spike-like' lesions: These are indicative of keratotic or follicular papules, which are hallmark signs of keratosis pilaris. In KPRF, they may be more pronounced and visible due to facial flushing.
3. Duration and exacerbation with psychological stress: The persistence of the redness for 13 months and the fact that it worsens with stress align with the chronic nature of KPRF and the common finding that symptoms may be exacerbated by stress or emotion, leading to increased blood flow and reddening of the cheeks.

KPRF is known to be more common during childhood and adolescence, and although it can be socially and psychologically distressing, it is typically harmless. However, it's important to note that due to the superficial nature of image-based diagnosis and history, this conclusion is hypothetical and intended for educational purposes only. In a real-world scenario, additional information, patient interviews, and possibly biopsy or alternative diagnostic testing could be necessary to confirm the diagnosis.



Done

**AI Symptom analysis and Image understanding \***

	1	2	3	4	5	
Weak	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	Great

**AI Diagnostic Reasoning \***

	1	2	3	4	5	
Weak	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	Great

Question Dermnet

**question:**A 43-year-old female with no known prior medical illnesses presented with lethargy,



headache, fevers, and myalgia of one week duration. She also reported an itchy left thigh lesion and was unaware of any insect bites. However, she had been to the woods to find firewood in a Sarawak rainforest about one week prior to the onset of the lesion..

**Diagnoses and explanation:** The image is typical of the skin lesions seen in scrub typhus; note the eschar formation with an erythematous periphery, coupled with the history of malaise and myalgia, and the geographical location. It is caused by bites of the trombiculid mite larvae (chiggers) which are infected with the bacteria *Orientia tsutsugamushi*.

## AI generated Response

Diagnosis: Erythema chronicum migrans, a characteristic sign of Lyme disease.

Clinical Features Supporting Diagnosis:

The image shows a circular, erythematous rash that appears to have a central clearing, making it look like a target, or "bull's-eye." This type of rash is known as erythema chronicum migrans and is typically seen in the early stage of Lyme disease, which is caused by the bacterium *Borrelia burgdorferi* transmitted by tick bites.

The patient's history of being in the woods of a rainforest area a week prior to the lesion appearing raises the possibility of exposure to ticks, which could transmit the causative organism. Her symptoms of lethargy, headache, fevers, and myalgia are consistent with the systemic manifestations of early Lyme disease. The fact that she did not notice any insect bites is not unusual since tick bites can be unnoticed as ticks are small and their bites are often painless.

Given both the history and the clinical presentation with this distinctive rash, Lyme disease is the most probable cause of her symptoms.



Done

**AI Symptom analysis and Image understanding \***

	1	2	3	4	5	
Weak	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	Great

**AI Diagnostic Reasoning \***

	1	2	3	4	5	
Weak	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	Great

Question **Dermnet**

**question:**A 90-year-old man presented with unilateral lower leg cellulitis. He also had a lesion on his

right lower leg that had been growing in size over the last few months and becoming more tender.

He previously worked as a farmer and spent a lot of time under the sun during his working years.

On examination, he had extensive erythema with significant oedema over the right lower leg, tracking up to the inner thigh. He also had a nodular, hyperkeratotic (crusted) lesion on his right lower leg that was tender on palpation.

**Diagnoses and explanation:** Cutaneous squamous cell carcinoma (SCC) usually begins as a tender erythematous papule or nodule that may have a variable amount of hyperkeratosis. Older lesions may ulcerate.

It is generally located on sun-exposed sites and usually enlarges over a period of months. They can arise in old scars, and in areas that have been subject to irradiation.

## AI generated Response

Diagnosis: Squamous Cell Carcinoma (SCC) complicated by cellulitis.

### Clinical Features Supporting Diagnosis:

The patient's history of prolonged sun exposure, especially considering his previous occupation as a farmer, is a significant risk factor for the development of non-melanoma skin cancers such as squamous cell carcinoma. The nodular, hyperkeratotic lesion that has been growing in size could be indicative of SCC. The crusted appearance and the tenderness on palpation also support this diagnosis.

The surrounding erythema and significant edema, which is tracking up to the inner thigh, are consistent with an inflammatory response, suggesting a secondary bacterial infection, like cellulitis. This is not uncommon in the context of skin cancers, as they can ulcerate and become secondarily infected, leading to cellulitis.

The unilateral aspect of the leg cellulitis, associated with a chronically evolving lesion and a history of significant environmental exposure risk factors, point toward an underlying SCC as the most probable cause, which has become complicated by cellulitis.



Done

### AI Symptom analysis and Image understanding \*

	1	2	3	4	5	
Weak	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	Great

### AI Diagnostic Reasoning \*

	1	2	3	4	5	
Weak	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	Great

### Question Dermnet

**question:**A 65-year-old man presented with a one week history of a widespread, itchy, painful rash affecting various parts of his body. The itchy weals progressed and expanded over a few hours and were persistent, lasting 48 hrs, painful, and resulted in some bruising.

He has a history of hypertension for which he took candesartan. He also had a total hip joint replacement one month prior to the onset of the rash, for which he was taking aspirin as VTE prophylaxis.

On review, he was febrile at 38.1°C and shivering with chills. His pruritus score was 9/10 and his pain score was 6/10. The rash was polymorphous.

His blood tests revealed a CRP of 91, with a normal white cell count.

Biopsy showed fibrinoid necrosis of small upper dermal vessels and leukocytoclasia. What are the differential diagnoses?

**Diagnoses and explanation:** Given the morphology and history of the rash, the differential diagnoses included:

Urticarial vasculitis

Erythema multiforme

Cutaneous lupus

Acute neutrophilic dermatosis.

With the histology showing leukocytoclastic vasculitis in specimen one (arm), the likely diagnosis is urticarial vasculitis. Weals lasting more than 24 hrs, bruising, and pain with itch are typical clinical findings.

## AI generated Response

Diagnosis: Leukocytoclastic vasculitis (LCV)

Clinical Features Supporting Diagnosis:

The images provided show a widespread rash with the following characteristics:

- Polymorphous appearance: The rash has different shapes and sizes.
- Itchy welts that are painful: This suggests an inflammatory process.
- Bruising: Indicates possible blood vessel involvement with extravasation of blood.
- Persistence of lesions over 48 hours: Suggests a more sustained inflammatory response rather than transient like urticaria.
- Fever and chills: Systemic symptoms often associated with infectious or inflammatory processes.

The patient's history and symptoms support the diagnosis of LCV:

- The timeframe of the rash appearing a month after hip replacement surgery: Raises the possibility of drug-induced vasculitis or a response to an infection.
- History of taking aspirin and candesartan: Both medications have been associated with drug-induced vasculitis.
- Elevated CRP and normal white cell count: Indicates an inflammatory but not necessarily infectious process.
- Biopsy findings of fibrinoid necrosis of small upper dermal vessels and leukocytoclasia: Pathognomonic for vasculitis, with leukocytoclasia being a hallmark of LCV.

Differential diagnoses for this condition could include urticaria, drug eruptions, connective tissue diseases like lupus, and other systemic vasculitides, but based on the clinical presentation, biopsy results, and patient history, leukocytoclastic vasculitis is the most probable diagnosis.



Done

### AI Symptom analysis and Image understanding \*

1                      2                      3                      4                      5

Weak                      ○                      ○                      ○                      ○                      ●                      Great

### AI Diagnostic Reasoning \*

1                      2                      3                      4                      5

Weak                      ○                      ○                      ○                      ○                      ●                      Great

Question Dermnet

**question:**34-year-old woman with trisomy 21 presented with a rapidly worsening rash of 4 months.



The rash was associated with marked scratching that started on her hands then spread throughout the body. She had no preceding skin disorders.

Other family members had a recent history of itch that improved with time but hers deteriorated.

On examination, she appeared miserable with thick, crusty plaques over her forehead, nails, fingers, wrists, toes, and soles with multiple linear fissures.

Dermoscopic examination showed many live mites and burrows.

**Diagnoses and explanation:** Crusted scabies is a highly contagious hyperinfestation with *Sarcoptes scabiei* var *hominis* a parasitic mites, presenting in immunocompromised patients. It is previously known as Norwegian scabies.

It is estimated that individuals with crusted scabies have up to 4,000 mites/g of skin. Patients are often infested with over 1 million mites. The majority of patients with normal scabies are infested with only with around 10–20 mites.

Scabies is readily diagnosed clinically and confirmed by identification of mites or eggs on dermoscopic or microscopic examination of burrows or scale in crusted disease.

## AI generated Response

Diagnosis: Scabies

Clinical Features Supporting the Diagnosis:

The photograph shows a hand with thick, crusty plaques and scales, particularly around the nail beds and fingers, which are typical features of crusted scabies (also known as Norwegian scabies), an advanced form of scabies associated with a high mite burden in the skin. The patient's history is also suggestive of scabies given the rapid worsening of the itchy rash that began on the hands and spread to other parts of the body. The intense itchiness leading to marked scratching, combined with the presence of multiple linear fissures, is indicative of the burrows created by the mites.

Additionally, the history of other family members having a similar but milder itch that improved over time aligns with the contagious nature of scabies, which often affects multiple people in close contact environments. The deterioration of the condition in the patient versus the improvement in family members may reflect her immunocompromised status due to trisomy 21, which could explain her more severe manifestation of the disease.

The definitive evidence comes from the dermoscopic examination, which revealed live mites and burrows, confirming the diagnosis of scabies. Crusted scabies can occur in people with immune system problems and can be much more severe, with thick crusts covering the skin that harbor large numbers of scabies mites.



Done

### AI Symptom analysis and Image understanding \*

1 2 3 4 5

Weak      Great

### AI Diagnostic Reasoning \*

1 2 3 4 5

Weak      Great

### Question Dermnet

**question:**A 30-year-old male patient hailing from Bihar, India, presented with multiple hypopigmented hypoesthetic patches over his trunk along with the pictured erythematous skin lesion with a punched-out centre.

**Diagnoses and explanation:**The 'swiss cheese' pattern is consistent with mid-borderline leprosy.

## AI generated Response

Diagnosis: Leprosy (Hansen's disease)

### Clinical Features Supporting Diagnosis:

The patient presents with multiple hypopigmented patches that exhibit loss of sensation (hypoesthesia), along with an erythematous skin lesion that has a distinctive punched-out center. The combination of hypopigmentation and sensory loss is characteristic of leprosy, particularly when the skin lesions are anesthetic, suggesting nerve involvement. The geography, as the patient hails from Bihar, India, where leprosy is endemic, further supports this diagnosis. Leprosy is a chronic infectious disease caused by *Mycobacterium leprae*, affecting the skin, mucous membranes, and peripheral nerves, which can lead to sensory loss in the affected areas. The erythematous lesion with central clearing could be a manifestation of the disease's inflammatory response in the skin.

Note: This response is based on the hypothetical scenario presented for educational purposes and is not a substitute for medical advice. If encountering similar symptoms, it is advised to consult a healthcare professional for accurate diagnosis and treatment.



Done

### AI Symptom analysis and Image understanding \*

	1	2	3	4	5	
Weak	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	Great

### AI Diagnostic Reasoning \*

	1	2	3	4	5	
Weak	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	Great

### Question Dermnet

**question:**A 12-week-old girl presented with a persistent rash on the thigh and armpit since her birth. Her parents had noted that she appeared persistently irritable, with no social smile, and was unable to fix on and follow objects or faces. She had a normal antenatal and birth history.

On examination, she had linear verrucous plaques with a few vesicles over her right thigh and left armpit.

**Diagnoses and explanation:**The likely diagnosis is incontinentia pigmenti (IP). It is a rare genetic condition characterised by skin, eyes, teeth, and CNS abnormalities.

The characteristic skin lesions of IP present at birth or develop in the first few weeks of life in about 90% of patients and tend to be linear or follow the lines of Blaschko.

## AI generated Response

Diagnosis: Incontinentia Pigmenti (Bloch-Sulzberger syndrome)

Clinical Features Supporting Diagnosis: The linear verrucous plaques, especially those that are following the lines of Blaschko, in conjunction with the vesicles, are typical of the inflammatory stage of incontinentia pigmenti. The fact that the rash has been persistent since birth and its distinct pattern are characteristic of this genodermatosis. Additionally, the patient's irritability and developmental concerns, such as the absence of a social smile and the inability to fix on and follow objects, may suggest neurological involvement which is a recognized feature of this condition. Incontinentia pigmenti is an X-linked dominant condition that mostly affects females and can present with skin, neurological, dental, and ocular abnormalities. The linear and swirling pattern of the skin manifestations are distinctive for this diagnosis.



Done

### AI Symptom analysis and Image understanding \*

	1	2	3	4	5	
Weak	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	Great

### AI Diagnostic Reasoning \*

	1	2	3	4	5	
Weak	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	Great

### Question Dermnet

**question:**A 58-year-old male presents with a six month history of erythroderma, non-responsive to topical and oral steroids. He is otherwise well and has no mucosal lesions or ocular involvement. What is this rash?

**Diagnoses and explanation:**This rash shows the classical 'deck chair sign', a clinical pattern characterised by selective sparing of skin folds and flexures in an erythematous eruption. Often widespread papules coalesce to form plaques, the papular component can be seen in the images. Deck chair sign is characteristic of papuloerythroderma of Ofuji (PEO). It has also been observed in:

Angioimmunoblastic lymphoma

Cutaneous T-cell lymphoma

Parthenium dermatitis

Cutaneous Waldenström macroglobulinemia

Pityriasis rubra pilaris

Acanthosis nigricans.

## AI generated Response

Diagnosis: Cutaneous T-cell lymphoma (Mycosis Fungoides).

Clinical Features Supporting Diagnosis:

The patient presents with generalized erythema covering a significant portion of his body surface area, indicative of erythroderma. Clinical features evident in the image include widespread redness and what appears to be fine scaling, with some areas presenting slight raised plaques. The chronicity of the condition, lasting six months, and its lack of response to both topical and oral steroids, make common inflammatory or allergic causes less likely.

Additionally, the patient's age (mid to late fifties) fits the typical demographic profile often affected by Mycosis Fungoides, a form of cutaneous T-cell lymphoma. The absence of mucosal lesions and ocular involvement is also consistent with this diagnosis, as Mycosis Fungoides generally does not involve these areas in its early stages.

Mycosis Fungoides commonly presents as patches or plaques and can progress to erythroderma, especially in the later stages. The clinical course and the image provided suggest Mycosis Fungoides as the most probable diagnosis given the information. However, it is imperative that a definitive diagnosis be confirmed with biopsy and appropriate clinical correlation.



Done



### AI Symptom analysis and Image understanding \*

	1	2	3	4	5	
Weak	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	Great

### AI Diagnostic Reasoning \*

	1	2	3	4	5	
Weak	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	Great

### Question Dermnet

**question:**A woman in her late 30s presents with acute erythema and oedema on the face, ears, neck, arms, upper chest, and back. Isolated areas of the skin are weeping due to vigorous scratching.

The itching seems to peak in the late hours of the night and the intensity will wake her from her sleep. She has a past history of asthma.

**Diagnoses and explanation:**The diagnosis is an acute atopic dermatitis (eczema). Further questioning elucidates she had experienced bouts of eczema since childhood.

Although it could easily be recurrent atopic dermatitis, it is important to ask about possible both irritant and contact allergen exposure.

## AI generated Response

Diagnosis: Acute Contact Dermatitis

Clinical Features Supporting Diagnosis:

1. Erythema (redness of the skin) and oedema (swelling) on the face, suggesting a localized inflammatory response.
2. Distribution of the rash on exposed areas such as the face, ears, neck, arms, upper chest, and back, which is compatible with areas that might come into contact with an allergen or irritant.
3. Weeping areas of skin due to vigorous scratching, which indicates severe pruritus (itching) and a potential superimposed infection or the formation of vesicles that have burst due to scratching.
4. The nocturnal peak of itching could be related to various factors, such as the absence of daily distractions, temperature changes, or circadian rhythm influences on the skin's inflammatory responses.
5. Past history of asthma is noteworthy as individuals with atopy (a genetic tendency to develop allergic diseases such as asthma, allergic rhinitis, and atopic dermatitis) are more susceptible to developing allergic contact dermatitis.

Given the history and clinical presentation, contact dermatitis seems like the most probable cause. The nocturnal itching and the patient's atopic history also raise the possibility of atopic dermatitis; however, the acute presentation and the distribution of the rash suggest a contact dermatitis, which may be allergic or irritant in nature, as the more likely diagnosis.



Done

**AI Symptom analysis and Image understanding \***

	1	2	3	4	5	
Weak	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	Great

**AI Diagnostic Reasoning \***

	1	2	3	4	5	
Weak	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	Great

Question **Dermnet**

**question:**A 77-year-old man was admitted to hospital with sepsis. He had a protracted hospital

course with recurrent infections and was treated with multiple courses of antibiotics including intravenous vancomycin.

He has developed blisters, initially appearing in the groin, then progressing to the trunk and limbs.

The blisters are evident in the image. The bullae appeared to have a predilection for the inguinal folds, axillae, and flanks.

**Diagnoses and explanation:**Diagnosis: Linear IgA bullous disease (LABD)

LABD is an autoimmune vesiculobullous disease. It can be idiopathic; secondary to medications or infections; or associated with some underlying disease (eg, inflammatory bowel disease, rheumatoid arthritis, malignancy).

Vancomycin is the most common drug associated with LABD. Lesions typically appear 24 hours to 15 days after the first dose.

## AI generated Response

Diagnosis: Bullous drug eruption, possibly Drug Reaction with Eosinophilia and Systemic Symptoms (DRESS) or a fixed drug eruption.

Clinical Features Supporting the Diagnosis:

- Presence of blisters, or bullae, particularly located in areas of skin folds such as the inguinal folds and likely the axillae and flanks, as mentioned.
- The bullae are well-demarcated and appear to be filled with clear or slightly yellowish fluid.
- The distribution and appearance of the bullae are suggestive of a drug-induced reaction, especially considering the patient's recent history of multiple courses of antibiotics.
- The temporal relationship between the administration of antibiotics, especially a known sensitizing agent like vancomycin, and the onset of symptoms supports the likelihood of a drug-induced etiology.
- The systemic condition of the patient, including sepsis and recurrent infections, along with the multiple treatments, increases the risk of adverse drug reactions.



Done

### AI Symptom analysis and Image understanding \*

	1	2	3	4	5	
Weak	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	Great

### AI Diagnostic Reasoning \*

	1	2	3	4	5	
Weak	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	Great

### Question Dermnet

**question:**A 25-year-old male was referred to our skin cancer clinic with a one year history of an asymptomatic, slowly enlarging lesion in the right postauricular area. A biopsy showed focal hypergranulosis, basal cell liquefactive degeneration, and a dense upper dermal infiltrate of lymphocytes and melanophages. What is the differential diagnosis?

**Diagnoses and explanation:**Clinically this resembles milia en plaque. However, the lesion is slightly infiltrated and other granulomatous conditions (eg, sarcoid) may be considered.

## AI generated Response

Diagnosis: Lichen Planus

### Clinical Features Supporting Diagnosis:

The lesion visible in the image is characterized by its violaceous hue and slightly raised, flat-topped appearance, which are typical features of lichen planus. The lesion's location in the postauricular area is not the most common site for lichen planus, but it can occur on any skin surface.

The patient's history of an asymptomatic, slowly enlarging lesion is consistent with the chronic nature of lichen planus, which can persist for several years in some cases. Additionally, lichen planus lesions are often well-circumscribed and can have fine, white lines called Wickham's striae on their surface, although these are not clearly visible in this image.

The biopsy findings are supportive of the diagnosis, as focal hypergranulosis and basal cell liquefactive degeneration are consistent with the histological appearance of lichen planus. The dense upper dermal infiltrate of lymphocytes corresponds to the band-like inflammatory infiltrate typically seen in lichen planus, and melanophages in the dermis can result from post-inflammatory hyperpigmentation associated with resolving lesions of lichen planus.

While lichen planus is the most probable cause based on the clinical and histopathological features, similar presentations may also be considered in the differential diagnosis, including lichenoid drug eruptions or other lichenoid dermatoses. However, in the context of this exercise, the given information most strongly supports a diagnosis of lichen planus.



Done

**AI Symptom analysis and Image understanding \***

Weak      1      2      3      4      5      Great

**AI Diagnostic Reasoning \***

Weak      1      2      3      4      5      Great

Question Dermnet

**question:**A 60-year-old farmer attends the assessment unit with a new enlarging lesion on his finger



over the past week. From a small red lump, it has grown to a larger tender target-like purple nodule several centimetres in size that appears to have pus just beneath the skin.

The patient admits he did try to 'burst' the lesion but very little came out of it. He has become quite concerned because he has also noticed a new painful lump in his underarm.

**Diagnoses and explanation:** This is an orf of the finger and a result of a zoonotic infection that often occurs in a person who have been handling sheep (such as lambing season in this farmer) or goats.

Orf lesions are generally solitary or few in number, and can be tender. They occur most commonly on the fingers, hands or forearms but can appear on the face.

Patients are largely asymptomatic although some may have some systemic upset or associated lymphadenopathy. In immunosuppressed individuals, they can develop into larger, persistent, or fungating lesions.

## AI generated Response

Diagnosis: Cutaneous anthrax

Clinical Features Supporting Diagnosis:

The image shows a lesion that has a characteristic black, necrotic, depressed eschar (scab) at the center, surrounded by edematous (swollen) and erythematous (reddened) skin that forms a target-like appearance. This presentation is typical of cutaneous anthrax. The presence of a central black eschar is a key feature that differentiates anthrax from other skin infections.

Additionally, the patient's occupation as a farmer increases the likelihood of contact with animals or animal products that are common vectors for the *Bacillus anthracis* spores, which cause anthrax. The rapid growth of the lesion over a week and accompanying regional lymphadenopathy (painful lump in the underarm) are also consistent with this infection.

Note: This response is for educational and hypothetical purposes. In practice, laboratory testing would be needed to confirm the diagnosis, and medical professionals would manage the condition according to clinical guidelines.



Done

### AI Symptom analysis and Image understanding \*

	1	2	3	4	5	
Weak	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	Great

### AI Diagnostic Reasoning \*

	1	2	3	4	5	
Weak	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	Great

### Question Dermnet

**question:**This 78-year-old lady presented with a new reddish-orange spreading rash on the right side of her face overnight. The affected skin was raised with a demarcated border and areas of blistering. Her white cell count and C-reactive protein were very raised and she described an episode of fever and rigors.

**Diagnoses and explanation:**This rash and history is classical for erysipelas.

Erysipelas is a superficial form of cellulitis, a potentially serious bacterial infection affecting the skin. Erysipelas affects the upper dermis and extends into the superficial cutaneous lymphatics.

## AI generated Response

Diagnosis: Cellulitis

### Clinical Features Supporting the Diagnosis:

The patient's presentation of a reddish-orange spreading rash with raised, demarcated borders and areas of blistering on the right side of her face is indicative of cellulitis. Cellulitis is a common bacterial skin infection that affects the deeper layers of skin and the underlying tissue.

The acute nature of the rash (appearing overnight), alongside systemic symptoms such as fever and rigors (shaking chills), supports an infectious etiology. The raised white cell count and elevated C-reactive protein are indicative of an acute inflammatory response to an infection.

The characteristics of the rash, such as its rapid spread, the clearly defined border, swelling, and area of blistering, further suggest cellulitis, particularly given the absence of a central lesion that would suggest a bite or sting, and the lack of other distinguishing marks suggesting an alternative diagnosis such as shingles or contact dermatitis.

The patient's age (78 years old) is also a relevant factor, as older individuals have a higher risk of developing cellulitis, possibly due to a weakened immune system and other comorbidities that may compromise skin integrity and the body's natural defenses against infection.

Given these clinical features and the patient's rapid onset of symptoms, cellulitis seems to be the most probable diagnosis for this case.



Done

**AI Symptom analysis and Image understanding \***

	1	2	3	4	5	
Weak	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	Great

**AI Diagnostic Reasoning \***

	1	2	3	4	5	
Weak	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	Great

Question **Dermnet**

**question:**An otherwise healthy 3-week-old girl presented to the children's assessment unit with a

rapidly progressing red patch on the left lateral periorbital region.

**Diagnoses and explanation:** Infantile haemangioma of the periorbital region, caused by the rapid growth of capillary blood vessels on the surface of the skin. Infantile haemangiomas characteristically develop in the first few weeks of life, up to three months of age.

## AI generated Response

Diagnosis: Infantile Hemangioma

Clinical Features Supporting Diagnosis:

Infantile hemangiomas are common vascular tumors of infancy that are typically not present at birth but proliferate rapidly within the first few weeks to months of life. The clinical features in the image supporting this diagnosis include:

- A red patch that is slightly raised above the skin level, which is characteristic of a superficial hemangioma.
- The bright red color, which is typical of the high vascularity of a hemangioma.
- The location in the periorbital region and the fact that it's on the lateral side, which are common sites for infantile hemangiomas.
- The rapid progression mentioned in the history aligns with the typical growth pattern of infantile hemangiomas, which undergo a rapid growth phase known as the proliferative phase.

The clinical presentation of a rapidly enlarging red patch in a 3-week-old infant fits well with the diagnosis of an infantile hemangioma, particularly given the absence of other accompanying symptoms such as fever or signs of systemic illness that might suggest an alternative diagnosis like an infection or an inflammatory condition.



Done

**AI Symptom analysis and Image understanding \***

Weak      1      2      3      4      5      Great

**AI Diagnostic Reasoning \***

Weak      1      2      3      4      5      Great

Question Dermnet

**question:**This 11-year-old female presented with disseminated flaccid blisters which were easily torn,

exposing a red oozing dermis. These blisters mainly affected the mucosal membrane of the eyes, mouth, and genitalia, in addition to the skin of the face, trunk, and proximal extremities two days prior to presentation.

She had hepatitis A before the blisters developed and was treated with tablets containing vitamins and supplements..

**Diagnoses and explanation:**Drug-induced epidermal necrolysis.

Differential diagnoses include:

Paraneoplastic pemphigus.

Staphylococcal scalded skin syndrome (this causes blistering on the body but not the mucous membranes)

Since the lesions affected >30% of the body surface area with a history of taking supplements, and there was no malignancy suspected, the diagnosis suggests drug induced toxic epidermal necrolysis.



## AI generated Response

Diagnosis: Stevens-Johnson Syndrome (SJS)

Clinical Features Supporting Diagnosis:

The patient presents with disseminated flaccid blisters that easily tear, exposing the underlying red oozing dermis. The involvement of mucosal membranes such as the eyes, mouth, and genitalia, in addition to the skin on the face, trunk, and proximal extremities, is highly indicative of Stevens-Johnson Syndrome. The acuity of onset—within two days prior to presentation—is also consistent with SJS, as lesions typically develop rapidly.

Stevens-Johnson Syndrome often follows an infection or as a reaction to a medication. The recent history of hepatitis A treatment and the use of tablets, which may have included medications or supplements, could have been the trigger for this hypersensitivity reaction. SJS is characterized by mucocutaneous tenderness and typical targets or purpuric macules, often with central blistering, which we can observe on the face of the patient.

The differential diagnosis may include other bullous diseases such as pemphigus vulgaris or paraneoplastic pemphigus, but these typically develop more gradually and are not usually associated with a recent history of medication use or infection. Given the history and the clinical presentation, SJS is the most probable diagnosis for this case.



Done

### AI Symptom analysis and Image understanding \*

1 2 3 4 5

Weak      Great

### AI Diagnostic Reasoning \*

1 2 3 4 5

Weak      Great

### Question Dermnet

**question:** A 52-year-old female patient presented to our clinic complaining of red-brown asymptomatic multiple plaques with defined borders on the abdomen for one year with a peripheral expansion.

On examination, there were oval plaques on the abdomen with a sclerotic centre surrounded by a violaceous border, with some coalescing to form a larger plaque.

There was no mention of any systemic symptoms and laboratory tests were unremarkable.

**Diagnoses and explanation:** A skin biopsy was obtained including subcutaneous fat, which demonstrated collagen bundles extending into the reticular dermis, enclosing the eccrine glands and blood vessels.

With the clinical and histological findings, the likely diagnosis is plaque morphea (morphea).

There are many subtypes of morphea such as plaque, linear, generalised, and pansclerotic. It is important to evaluate the patient for systemic symptoms and with laboratory tests such as ANA, anti-histone antibodies, and anti-SS DNA antibodies.

## AI generated Response

Diagnosis: Morphea (Localized Scleroderma)

Clinical Features Supporting Diagnosis:

The image and patient history are suggestive of morphea, also known as localized scleroderma, which is a condition characterized by thickening of the skin and subcutaneous tissues. In this case, the red-brown plaques with defined borders and peripheral expansion, along with the absence of systemic symptoms, point towards morphea. Key clinical features include:

1. Plaques with a sclerotic center: The hardened, sclerotic areas in the center of the plaques are common in morphea, representing fibrosis of the dermis and sometimes the underlying subcutis.

2. Violaceous border: The violaceous or purple ring surrounding the plaques is typical of the inflammatory phase of morphea, often seen before the full development of sclerosis.

3. Well-defined borders: Morphea typically presents with plaques that have distinct, sharp edges separating them from the normal surrounding skin.

4. Lack of systemic symptoms: Morphea tends to be confined to the skin and does not typically cause systemic symptoms, which aligns with the patient's lack of systemic issues.

5. Oval plaques: The shape of the plaques seen in the image is common in morphea, and they may sometimes coalesce to form larger patches.

6. Duration and expansion: Morphea plaques often slowly expand peripherally over time, as observed in this patient for a duration of one year.

Unremarkable laboratory tests further support the diagnosis, as morphea usually does not have associated abnormal laboratory findings unlike systemic sclerosis, which may present with changes such as autoantibodies.

Given the combination of the clinical presentation and the history provided, morphea seems to be the most probable diagnosis.



Done

**AI Symptom analysis and Image understanding \***

	1	2	3	4	5	
Weak	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	Great

**AI Diagnostic Reasoning \***

	1	2	3	4	5	
Weak	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	Great

Question **Dermnet**

**question:**A 6-hour-old male neonate presented with a shiny membrane covering his body since birth.

The baby was born at term and was the second child in the family with the same skin abnormality.

On examination, the whole body was covered with a plastic-like membrane, which started to peel off on the face, chest, and intertriginous areas.

Associated findings included ectropion (outward turning eyelid), claw-like hands, and limitation of joint movements. The hair and nails were not affected, and no other congenital anomalies were detected. Blood panel and urinalysis were within the normal range..

**Diagnoses and explanation:**The likely diagnosis is collodion baby, a rare congenital disorder due to a mutation of certain genes which manifest as a tight, clear sheath covering their skin called a collodion membrane, that usually dries and peels off during the first few weeks of life.

The most common underlying diseases:

Lamellar ichthyosis

Non-bullous congenital erythroderma.

Other rarer conditions that may present with a collodion membrane include:

Sjögren Larsson syndrome

Gaucher Disease type 2

Hay-Wells syndrome

Trichothiodystrophy

Netherton syndrome

Ectodermal dysplasia

Neutral lipid storage disease.

10% of collodion babies have normal underlying skin – a mild presentation known as ‘self-healing’ collodion baby.

### **AI generated Response**

Diagnosis: Harlequin Ichthyosis

Clinical Features Supporting Diagnosis:

- The presence of a thick, shiny, armor-like membrane covering the neonate's body at birth is highly indicative of harlequin ichthyosis, a severe genetic skin disorder.
- Peeling of the membrane, especially on the face, chest, and intertriginous areas, aligns with the shedding process associated with this condition as the initial membrane is usually replaced with severe scaling.
- The observed ectropion, which is an outward turning of the eyelids, is a common sign in those affected by harlequin ichthyosis.
- The claw-like deformity of the hands and the limitation of joint movements are due to the tightness and inflexibility of the skin.
- Lack of involvement of hair and nails and the absence of other congenital anomalies suggest that the issue is primarily dermatologic.
- Normal blood panel and urinalysis do not exclude genetic skin conditions, which would not necessarily be reflected in these tests.

The genetic nature of this condition is supported by the history of a sibling with a similar abnormality, suggesting a possible autosomal recessive inheritance pattern.



Done

**AI Symptom analysis and Image understanding \***

1 2 3 4 5  
Weak      Great

**AI Diagnostic Reasoning \***

1 2 3 4 5  
Weak      Great

Question Dermnet

**question:**This 40-year-old man has had three attacks of lesions which affect both his palms and



soles. These attacks have occurred over the last three months, and last about 10 days.

**Diagnoses and explanation:** This is recurrent erythema multiforme. He has some target-like lesions that are characteristic of this eruption.

## AI generated Response

Diagnosis: Palmoplantar pustulosis (PPP)

Clinical Features Supporting Diagnosis:

- The image shows multiple sterile pustules on reddened bases, which are typically seen in palmoplantar pustulosis.
- The distribution is characteristic, affecting the palms and potentially also the soles, as noted in the patient's history.
- The recurrent nature of the episodes as described by the patient is typical for PPP, which often shows a relapsing-remitting course.
- The duration of the attacks, lasting about 10 days, fits within the range often observed with this condition.
- The absence of other information that might point towards generalized pustular psoriasis or other systemic illnesses supports the focus on PPP.

Palmoplantar pustulosis is a chronic, recurrent pustular dermatosis localized to the palms and soles, and it can be associated with other systemic conditions such as psoriasis, though it is considered a separate entity by many authorities.



Done

**AI Symptom analysis and Image understanding \***

1                      2                      3                      4                      5

Weak                                                                                                                                    Great

**AI Diagnostic Reasoning \***

1                      2                      3                      4                      5

Weak                                                                                                                                    Great

Question Dermnet

**question:** This 25-year-old man has got round, brown, scaly patches over his chest. It has been

diagnosed as a fungal infection but has not responded to oral terbinafine for two weeks..

**Diagnoses and explanation:** The superficial brown scaly patches are highly suggestive of a yeast infection called pityriasis versicolor — it is due to a yeast called *Malassezia* and not a dermatophyte fungus.

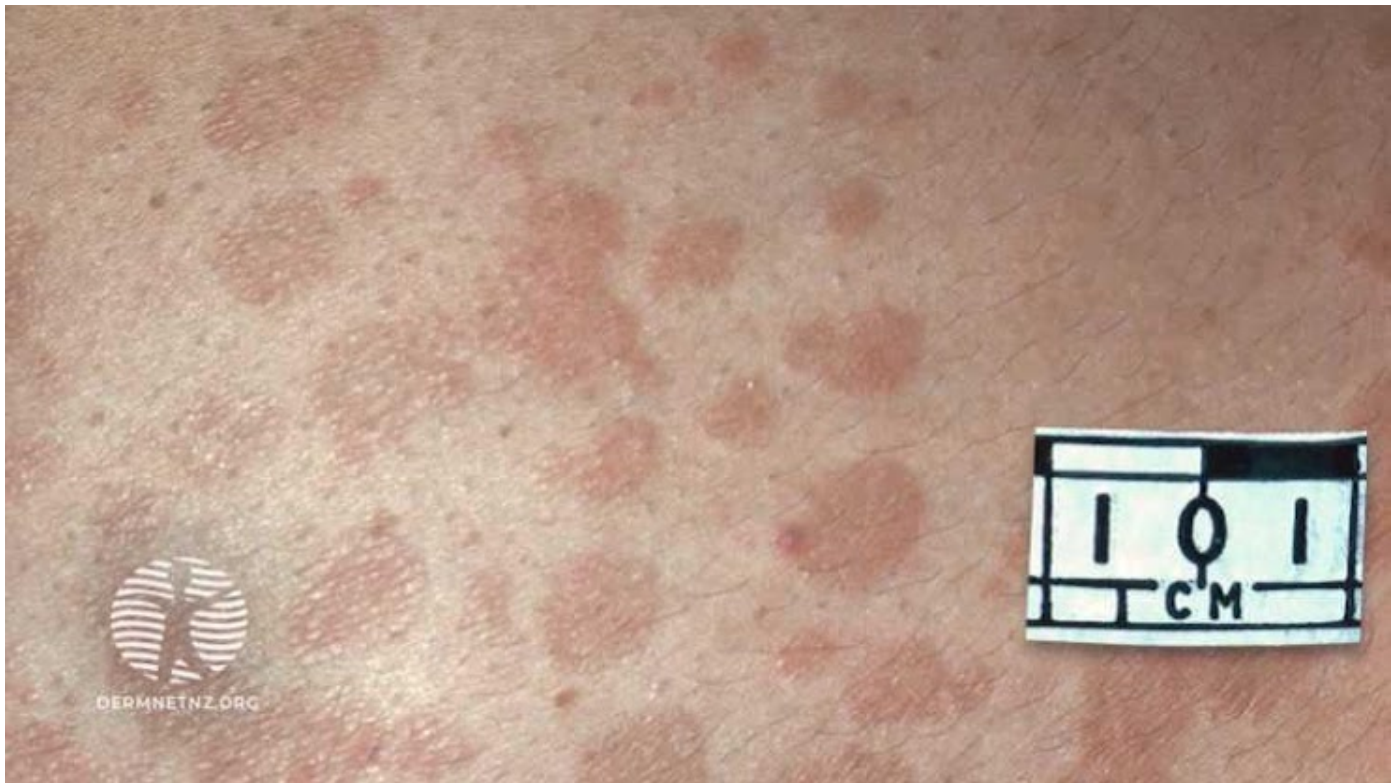
## AI generated Response

Diagnosis: Pityriasis Versicolor (Tinea Versicolor)

Clinical Features Supporting Diagnosis:

- The presentation of round, brown, scaly patches is typical of Pityriasis Versicolor, a benign fungal infection of the skin caused by *Malassezia* species.
- Lack of response to terbinafine suggests that the causative organism may not be a dermatophyte, which is what terbinafine targets. *Malassezia* is a yeast, which often requires different antifungal treatment, such as azoles or selenium sulfide.
- The distribution over the chest and the appearance of hypopigmented or hyperpigmented patches with a fine scale are characteristic of Pityriasis Versicolor.
- This condition is common in young adults and can often be recurrent or recalcitrant to treatment.

It is important for this patient to follow up with a dermatologist and possibly have a skin scraping for microscopic examination to confirm the diagnosis. Treatment may involve topical or systemic antifungals, but with agents more effective against *Malassezia* species.



Done

### AI Symptom analysis and Image understanding \*

	1	2	3	4	5	
Weak	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	Great

### AI Diagnostic Reasoning \*

	1	2	3	4	5	
Weak	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	Great

### Question Dermnet

**question:**This elderly lady has a rash affecting both lower legs. It is weepy and itchy. She has not responded to a week of oral antibiotics.

**Diagnoses and explanation:**This is bilateral lower leg eczema, and it is often multifactorial. There is often underlying venous incompetence, compounded by both irritant or allergic contact dermatitis. It is often bilateral, which cellulitis is almost never!

## AI generated Response

Diagnosis: Stasis dermatitis

### Clinical Features Supporting Diagnosis:

The image shows an elderly lady's lower leg with a weepy and itchy rash, which is characteristic of stasis dermatitis. This condition is common in the elderly and is associated with chronic venous insufficiency. Clinical features evident from the image that support the diagnosis of stasis dermatitis include:

- Location: The rash is located on the lower leg, which is a typical site for stasis dermatitis due to gravitational effects on venous blood flow and weakened venous return in the lower extremities.
- Appearance: The skin shows erythema (redness), scaling, and weepy erosions which are indications of inflammation and possible secondary infection on top of the dermatitis. There is also some crusting and hyperpigmentation, which suggests chronicity of the condition.
- Lack of response to antibiotics: The patient's non-response to oral antibiotics suggests that a primary bacterial infection is unlikely to be the cause of the rash and supports the idea of a dermatitis with possible secondary infection or colonization.

These features, taken together with the bilaterality of the rash and the patient's age, make stasis dermatitis the most probable cause. It's worth noting that oral antibiotics would not typically be effective against stasis dermatitis as the primary problem lies in the compromised venous circulation rather than a primary bacterial infection. Treatment typically includes leg elevation, compression therapy, and topical treatments to address the symptoms and skin care.



Done

**AI Symptom analysis and Image understanding \***

	1	2	3	4	5	
Weak	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	Great

**AI Diagnostic Reasoning \***

	1	2	3	4	5	
Weak	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	Great

Question Dermnet

**question:**This 15-year-old boy has intensely itchy, excoriated, and weepy patches on both legs. They

have not responded to oral flucloxacillin..

**Diagnoses and explanation:**The picture looks like acute discoid eczema – there are exuding, excoriated, weepy well-defined plaques on the lower legs. Affected individuals are often atopic.

## AI generated Response

Diagnosis: Atopic Dermatitis (Eczema)

Clinical Features Supporting Diagnosis:

The image exhibits intensely itchy, excoriated (scratched), and weepy patches that are characteristic of atopic dermatitis, commonly known as eczema. Supporting features for this diagnosis are:

- The presence of erythematous (red) patches with excoriations suggests intense itching leading to repeated scratching.
- The weeping or oozing aspect of the lesions can represent acute flare-ups with serous exudate, often occurring in eczema.
- The bilateral and symmetrical distribution on both legs is typical for atopic dermatitis, which is known to affect areas such as the flexural regions of the limbs.
- Lack of response to flucloxacillin, an antibiotic, indicates that the primary issue is not strictly bacterial in nature which would expect to show some improvement with antibiotics if a secondary bacterial infection were the primary problem.
- Atopic dermatitis is common in adolescence and can be exacerbated by various factors, including environmental triggers, stress, and allergens.
- The chronic appearance of the lesions, with areas that look more healed and others that are freshly excoriated, suggests an ongoing, relapsing condition like atopic dermatitis.

Given that atopic dermatitis is commonly associated with superimposed infections due to skin barrier disruption, the lack of response to flucloxacillin could suggest either a non-bacterial etiology of the weeping (like serous exudate) or a secondary infection with a resistant organism. However, the primary underlying issue appears to be atopic dermatitis, and management would focus on restoring the skin barrier, reducing inflammation, and addressing itch, possibly with the addition of more comprehensive treatment for any secondary infections if identified.





Done

**AI Symptom analysis and Image understanding \***

Weak      1      2      3      4      5      Great

**AI Diagnostic Reasoning \***

Weak      1      2      3      4      5      Great

Question Dermnet

**question:**A 23-year-old female presents with a six-week history of an erythematous rash starting

around the feet then spreading cephalically until covering 60% of the skin surface, predominantly over the torso.

The patient started lamotrigine two months prior to presentation and the dose slowly uptitrated for epilepsy control.

A biopsy showed subcorneal pustules; direct immunofluorescence was negative.

**Diagnoses and explanation:** The likely cause is lamotrigine-induced generalised pustular psoriasis (GPP). Lamotrigine is a widely used antiepileptic commonly producing cutaneous side effects (incidence 10%). However, this is the first report of lamotrigine-induced GPP.

Other differential diagnoses would include:

Acute generalised exanthematous pustulosis – this typically starts within days of drug introduction and is known to resolve within 15 days (in contrast to GPP which takes months to resolve) with drug discontinuation.

Subacute lupus erythematosus – this is often drug-induced, producing annular scaly lesions over the trunk

Pemphigus foliaceus – blisters are seldom seen as they occur superficially and burst easily; IMF would also be positive..

## AI generated Response

Diagnosis: Drug reaction with eosinophilia and systemic symptoms (DRESS) syndrome

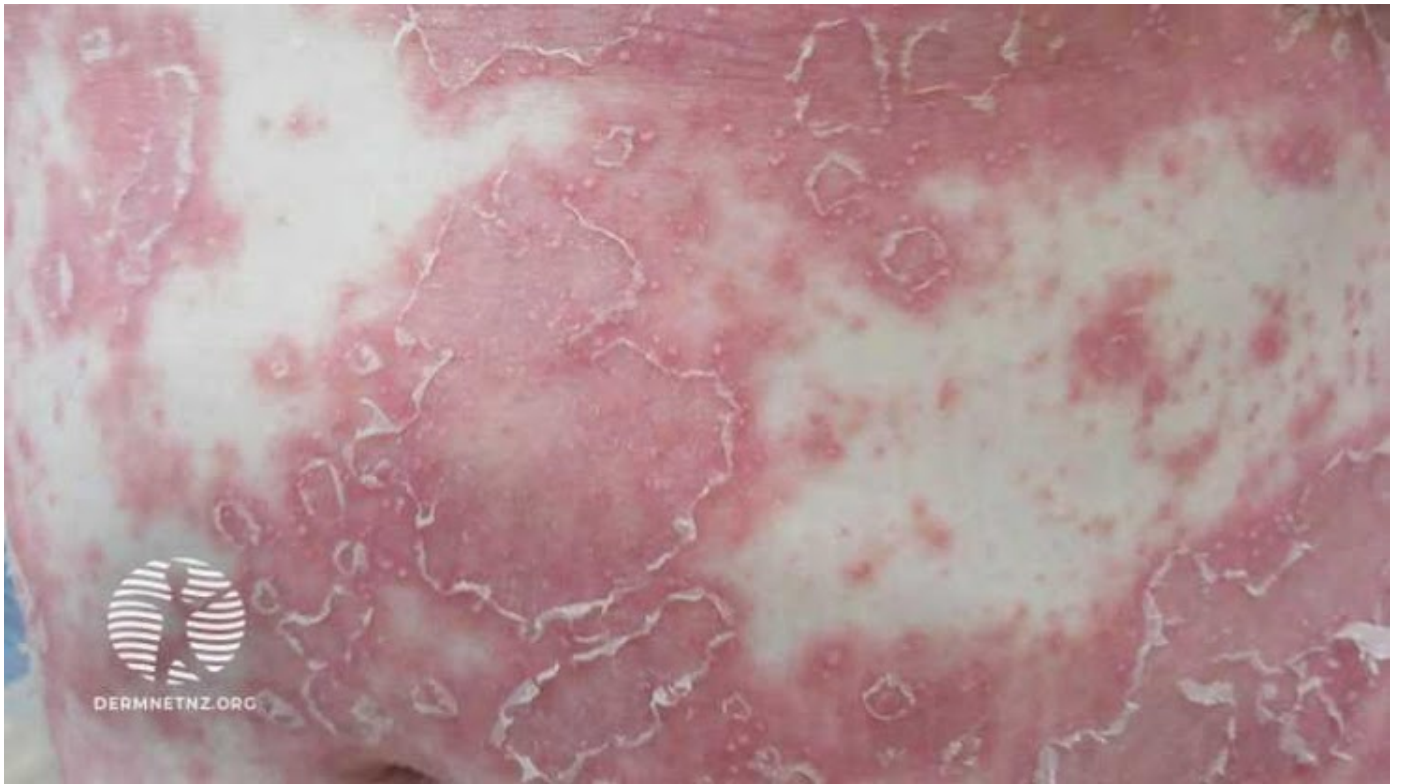
### Clinical Features Supporting Diagnosis:

The patient has developed an erythematous rash that has progressively spread, now covering a significant portion of the body surface area. This extensive skin involvement, starting from the feet and spreading cephalically, is an indication of a systemic reaction. The onset in relation to the initiation of lamotrigine—a drug with a well-recognized potential to cause severe cutaneous adverse reactions including DRESS syndrome—is temporally suggestive. In DRESS syndrome, the rash onset is typically delayed by several weeks after the initiation of the offending medication, which fits the history presented here.

The typical course of DRESS syndrome starts with a fever followed by the rash, which can progress to involve more than 50% of the body surface area, as in this case. While the image shows a rash, it is not possible to evaluate systemic signs such as fever, lymphadenopathy, or internal organ involvement. However, the cutaneous features and temporal association with drug exposure are strong indicators.

Biopsy findings of subcorneal pustules without direct immunofluorescence findings are consistent with a drug-induced reaction and do not necessarily contradict the diagnosis of DRESS syndrome, which can have diverse histological features but is characterized by the presence of eosinophilia and systemic symptoms.

Please note that for a complete diagnosis, additional clinical information such as a complete blood count (including eosinophil count), liver function tests, and evaluation for potential organ involvement (e.g., renal, hepatic, cardiac) would be necessary as these are part of the diagnostic criteria for DRESS syndrome. Due to the seriousness of this condition, immediate cessation of the offending drug and appropriate medical management are essential.



Done

**AI Symptom analysis and Image understanding \***

Weak      1      2      3      4      5      Great

**AI Diagnostic Reasoning \***

Weak      1      2      3      4      5      Great

Question **Dermnet**

**question:**This 15-year-old boy has just returned from a holiday in Thailand. He had a beach "tattoo"

undertaken 10 days ago. Within a few days he developed persisting, itchy, red areas where the tattoo had been applied.

**Diagnoses and explanation:** The likely cause of his reaction to the beach 'henna tattoo' is an allergic contact dermatitis to the black dye chemical paraphenylenediamine (PPD). Although the tattoo solution does contain some henna, this is much less likely to be the sensitiser.

## AI generated Response

Single Diagnosis: Contact dermatitis due to a temporary tattoo

### Clinical Features Supporting Diagnosis:

The clinical presentation of persistent itchy, red areas following the application of a temporary tattoo strongly suggests contact dermatitis. In this case, the pattern of the dermatitis matches the area where the tattoo was applied, indicating that the reaction is localized to the tattoo ingredients. The image shows erythema (redness) and possible vesiculation (blistering) or raised areas, which are common in cases of contact dermatitis. Allergic reactions to the dyes or chemicals used in temporary tattoos, like paraphenylenediamine (PPD), which is commonly found in black henna tattoos, can result in such skin reactions. This substance can cause allergic reactions in some individuals, typically appearing 48-72 hours after application and sometimes longer, which is consistent with the history provided.



Done

### AI Symptom analysis and Image understanding \*

	1	2	3	4	5	
Weak	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	Great

### AI Diagnostic Reasoning \*

	1	2	3	4	5	
Weak	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	Great

### Question Dermnet

**question:**This man has had recurring sore lesions always on the left side of his palate.

**Diagnoses and explanation:**The recurrent nature of the eruption occurring in the same area of the palate and the clustering of the vesicles and later erosions is typical of herpes simplex virus (HSV) infection, usually HSV type 1.

## AI generated Response

Diagnosis: Recurrent Aphthous Stomatitis (Canker Sores)

Clinical Features Supporting Diagnosis:

The image shows a well-demarcated, shallow ulcer with a yellowish-white pseudomembrane and an erythematous halo on the left side of the hard palate. Recurrent aphthous stomatitis, commonly known as canker sores, typically presents with one or more painful, round to oval ulcers with a red border and a white or yellow floor, often on the non-keratinized mucosal surfaces inside the mouth. The recurring nature of the lesions and their restriction to one side of the palate align with the patterns often observed in canker sores. The absence of significant surrounding erythema beyond the immediate margin of the lesion and lack of systemic symptoms further support this diagnosis. Other symptoms commonly associated with canker sores, not visible in the image, might include pain especially in response to physical contact like eating or brushing teeth, which is consistent with the patient's history of "sore lesions."



Done



### AI Symptom analysis and Image understanding \*

	1	2	3	4	5	
Weak	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	Great

### AI Diagnostic Reasoning \*

	1	2	3	4	5	
Weak	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	Great

### Question Dermnet

**question:** 19-year-old female presented with:

Photosensitivity

Facial erythema with telangiectasia

Pain and swelling of the small joints of the hand and the knee joints bilaterally

Diffuse hair loss

Oral ulcers

Erythematous scaly plaques involving the hands, legs, scalp, and trunk which bleed on scratching (onset 1 year ago).

Laboratory results:

Low haemoglobin

Positive antinuclear antibodies (ANA) and anti-double stranded DNA (anti-dsDNA).

She has a history of psoriasis, and had scaly lesions on her elbow and palms.

**Diagnoses and explanation:** This is systemic lupus erythematosus (SLE) overlapping with psoriasis.

## AI generated Response

Diagnosis: Systemic Lupus Erythematosus (SLE) with possible co-existing Psoriasis

Clinical Features Supporting Diagnosis:

- Photosensitivity: This is a common symptom in SLE, where exposure to sunlight can trigger or worsen skin lesions and other symptoms.
- Facial erythema with telangiectasia: The classic "butterfly rash" across the cheeks and nose bridge is typical of SLE and is often exacerbated by UV exposure.
- Pain and swelling of the small joints of the hand and the knee joints bilaterally: Joint pain and inflammation are seen in SLE, which can lead to arthritis with symmetrical involvement.
- Diffuse hair loss: Lupus can cause telogen effluvium, a diffuse hair shedding, often coupled with alopecia where hair loss occurs in patches.
- Oral ulcers: These are one of the oral manifestations of SLE, typically painless and observed on the palate, buccal mucosa, or other areas within the mouth.
- Erythematous scaly plaques on the hands, legs, scalp, and trunk which bleed on scratching: These may be representative of discoid lupus erythematosus (DLE), a chronic form of cutaneous lupus, or could be psoriatic plaques given the patient's history of psoriasis.
- Positive antinuclear antibodies (ANA) and anti-double stranded DNA (anti-dsDNA): These are specific serological markers often found in SLE, with anti-dsDNA particularly specific for the diagnosis.
- Low hemoglobin: SLE can lead to various hematologic abnormalities, including anemia.
- History of psoriasis and scaly lesions on elbows and palms: This suggests that the patient has a co-existing psoriasis, which is an inflammatory skin condition that can present with silvery scaly plaques.

The combination of these clinical features and laboratory results, alongside the history of psoriasis, supports the diagnosis of SLE, which could include an overlap syndrome where the patient has features of both SLE and psoriasis. It is critical to note that SLE is a systemic autoimmune disease that can affect multiple organ systems, and this patient's cutaneous manifestations, serological markers, and systemic symptoms are consistent with an SLE diagnosis.



Done

### AI Symptom analysis and Image understanding \*

Weak      1      2      3      4      5      Great

### AI Diagnostic Reasoning \*

Weak      1      2      3      4      5      Great

Question Dermnet

**question:**A 50-year-old lady presented with erythroderma. It started with widespread itchy rash,

followed by skin desquamation.

On examination, her skin is erythrodermic with small islands of normal skin. Both palms and soles appeared waxy, diffusely thickened and yellowish with multiple linear fissures. Her nails are also thickened.

**Diagnoses and explanation:** Pityriasis rubra pilaris (PRP) is a group of papulosquamous dermatoses.

There are 5 major types of PRP, plus an HIV-associated type has been described. The distinction is mostly based on age of onset and distribution. Adult classic form (type 1) is the most common form..

### **AI generated Response**

Diagnosis: Psoriatic erythroderma

Clinical Features Supporting the Diagnosis:

- The patient's history of a widespread itchy rash progressing to skin desquamation is consistent with the inflammatory nature of psoriasis.
- Erythroderma is characterized by extensive redness and scaling of the skin, which is apparent in the image provided. This can be a severe manifestation of psoriasis.
- The presence of small islands of normal skin, known as "nappes claires", is characteristic of erythrodermic psoriasis.
- The thickened, yellowish appearance of the palms and soles, resembling wax, with linear fissures, is indicative of palmoplantar keratoderma, which is often associated with psoriasis.
- Nail thickening and discoloration are also common in psoriatic nail involvement.

These clinical features, in association with the patient's age and presentation, support a diagnosis of psoriatic erythroderma, which is a life-threatening form of psoriasis that necessitates urgent medical attention.



Done

### AI Symptom analysis and Image understanding \*

	1	2	3	4	5	
Weak	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	Great

### AI Diagnostic Reasoning \*

	1	2	3	4	5	
Weak	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	Great

#### Question Dermnet

**question:**A 47-year old man with a recent acute myeloid leukaemia relapse presented with multiple purple lesions on the anterior chest and forearms. The lesions were not itchy or tender.

On examination, multiple similar purple lesions with a peripheral erythematous rim and a haemorrhagic crust at the centre were seen.a

**Diagnoses and explanation:**Sweet syndrome (acute febrile neutrophilic dermatosis). It is a type of neutrophilic dermatosis.

Sweet syndrome usually has an acute onset of erythematous, oedematous plum coloured papules and plaques that are tender but not pruritic, with the face and trunk being the common areas to be affected. Lesions may occur in the mouth and conjunctivitis and episcleritis are well reported. There is often peripheral blood neutrophilia and fever.

## AI generated Response

Diagnosis: Ecthyma gangrenosum

Clinical Features Supporting the Diagnosis:

The patient's history of acute myeloid leukemia (AML) relapse suggests a state of immunocompromise, which increases the risk of opportunistic infections. The description and appearance of the lesions, which are multiple purple lesions with a peripheral erythematous rim and hemorrhagic crust at the center, are consistent with ecthyma gangrenosum.

Ecthyma gangrenosum is a cutaneous lesion typically caused by *Pseudomonas aeruginosa*, particularly in immunocompromised individuals. The characteristic findings of ecthyma gangrenosum include:

- Necrotic ulcers with surrounding erythema
- A central black eschar (hemorrhagic crust)
- An absence of significant pain or pruritus is also typical, as described in the patient's history

These clinical features are indicative of the vascular invasion and subsequent necrosis that occur with this bacterial infection. It's important for this patient to be evaluated and treated quickly considering his compromised immune system due to AML.





Done

### AI Symptom analysis and Image understanding \*

1 2 3 4 5

Weak      Great

### AI Diagnostic Reasoning \*

1 2 3 4 5

Weak      Great

### Question Dermnet

**question:** A 52-year old gentleman presented with widespread rash of one week's duration - it started 3 days following commencement of oral flucloxacillin and fluconazole for oral thrush and possible candida infection at the groin.

On examination, there was desquamation on the palm, and erythema studded with multiple tiny pustules coalescing into larger pustular lakes on the trunk and limbs.

**Diagnoses and explanation:** Acute generalised exanthematous pustulosis (AGEP), also known as toxic pustuloderma.

AGEP is an uncommon pustular drug eruption characterised by superficial pustules coalescing to form pustular lakes on an erythematous base. There is superficial epidermal detachment in areas where the pustules have become confluent. The time interval between drug ingestion and onset is short (2–3 days).

Occasionally it may be localised to limited areas of skin such as the face (acute localised exanthematous pustulosis)

## AI generated Response

Diagnosis: Acute Generalized Exanthematous Pustulosis (AGEP)

Clinical Features Supporting Diagnosis:

1. **Timing and Relationship to Medication:** The rash developed three days after the commencement of oral flucloxacillin and fluconazole. AGEP is often triggered by medications and typically appears within the first week of exposure to the causative drug.
2. **Distribution and Morphology of the Rash:** The image shows erythema (redness) accompanied by numerous small pustules. This presentation is typical for AGEP, with pustules often grouped and sometimes forming "lakes" of pus on a background of generalized erythema.
3. **Desquamation on Palms:** The presence of skin peeling is suggestive of a severe skin reaction, which can be seen in AGEP following the resolution of the pustular lesions.
4. **The pattern of Widespread Rash:** AGEP is characterized by a rapid onset of numerous sterile pustules on an erythematous base, which can become widespread or generalized, involving the trunk and limbs.

Given the information presented along with the visual evidence of the characteristic rash, these clinical features support a diagnosis of AGEP. It is important to note that the discontinuation of the offending medications and appropriate management, such as supportive care and possibly corticosteroids, would be indicated.



Done

**AI Symptom analysis and Image understanding \***

Weak      1      2      3      4      5      Great

**AI Diagnostic Reasoning \***

Weak      1      2      3      4      5      Great

Question Dermnet

**question:**A 25-year old female presented with rapid swelling, mottling and pain on both palms when

exposed to water for a brief time (3-5 minutes). The symptoms resolve within 30 minutes after the hands are dried.

**Diagnoses and explanation:** Aquagenic wrinkling of the palms. It is a rare dermatosis that usually presents in the 2nd decade of life with equal sex incidence.

It is an exaggeration of the normal finger wrinkling that occurs when fingers are soaked in water for a prolonged period.

## AI generated Response

Diagnosis: Aquagenic wrinkling of the palms (AWP)

Clinical Features Supporting Diagnosis:

The image shows a hand with prominent wrinkling on the palmar surface, which is a characteristic feature of aquagenic wrinkling of the palms. AWP is a rare condition characterized by the rapid development of exaggerated skin wrinkling and edema of the palms after brief exposure to water. The clinical course described, with symptoms resolving within 30 minutes after drying the hands, is consistent with this condition. The mottling and pain are also consistent with AWP, which can sometimes be associated with mild discomfort. A lack of visible signs of skin breakage, infection or chronic skin disease helps to rule out other conditions, such as infections or dermatitis. AWP is more commonly reported in young women and can be exacerbated by factors such as perspiration, exposure to water, and sometimes hormonal changes.



Done

### AI Symptom analysis and Image understanding \*

	1	2	3	4	5	
Weak	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	Great

### AI Diagnostic Reasoning \*

	1	2	3	4	5	
Weak	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	Great

#### Question Dermnet

**question:**A 4-month old infant presented with severe exacerbation of eczema and poor feeding.

On examination, he has low grade fever with multiple monomorphic clustered vesicles over his face, neck, trunk and legs. He is mildly dehydrated.

**Diagnoses and explanation:**Eczema herpeticum is also known as Kaposi varicelliform eruption. It is a skin infection caused by Herpes simplex virus (HSV) type I and II.

It most commonly develops in individuals who already have atopic dermatitis/eczema.

## AI generated Response

Diagnosis: Eczema Herpeticum

Clinical Features Supporting Diagnosis:

- The presence of multiple monomorphic clustered vesicles is characteristic of an infection with herpes simplex virus, especially in the context of a patient with eczema.
- The widespread distribution of the vesicles over the patient's face, neck, trunk, and legs is consistent with eczema herpeticum, a disseminated herpes simplex virus infection that occurs in the setting of pre-existing atopic dermatitis (eczema).
- The low-grade fever and signs of dehydration can be associated with systemic involvement, which is common in eczema herpeticum.
- The severe exacerbation of the underlying eczema and poor feeding are clinical features that might be observed in an infant suffering from a significant skin infection such as eczema herpeticum.
- The acute presentation with vesicles and systemic symptoms, such as fever, in the context of atopic dermatitis strongly supports this diagnosis.



Done

### AI Symptom analysis and Image understanding \*

	1	2	3	4	5	
Weak	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	Great

### AI Diagnostic Reasoning \*

	1	2	3	4	5	
Weak	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	Great

### Question Dermnet

**question:**This 3-month old infant presented with a rapidly growing lesion on the back of her ear. The plaque is bright red, non-pulsatile, and non-tender.

She also has another similar lesion on her anterior abdomen.

**Diagnoses and explanation:**Vascular malformation such as a port-wine stain. They usually present at birth and persist throughout life.

Vascular tumours such as:

Congenital haemangioma (can be non-involuting or rapidly involuting)

Pyogenic granuloma

Tufted angioma.

Malignant tumour such as angiosarcoma (rare)



## AI generated Response

Diagnosis: Infantile Hemangioma

### Clinical Features Supporting Diagnosis:

The lesion presented in the image is a bright red plaque, which is commonly associated with infantile hemangiomas. These lesions are typically non-tender, and the fact that this one is non-pulsatile helps to differentiate it from other vascular anomalies. Infantile hemangiomas often appear within the first few weeks to months of life and characteristically have a phase of rapid growth followed by more gradual involution. The description of the lesion as rapidly growing is consistent with the proliferative phase of an infantile hemangioma. Additionally, the presence of a similar lesion on the anterior abdomen of the infant further supports this diagnosis, as it is not uncommon for multiple hemangiomas to appear on the same patient. The overall clinical picture described in the patient's history, in conjunction with the visual cues from the image, strongly suggests that this lesion is an infantile hemangioma.



Done

### AI Symptom analysis and Image understanding \*

	1	2	3	4	5	
Weak	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	Great

### AI Diagnostic Reasoning \*

	1	2	3	4	5	
Weak	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	Great

### Question Dermnet

**question:**A newborn presents with an unusual birthmark confined to one leg..

**Diagnoses and explanation:**A linear epidermal naevus. It is an overgrowth of the epidermis and usually presents at birth or during early childhood. It is mostly flat and hyperpigmented, but there is slight thickening and scale around the ankle.

## AI generated Response

Diagnosis: Congenital Melanocytic Nevus

Clinical Features Supporting Diagnosis:

The image shows a large, pigmented lesion with an irregular border and varied hues of tan and brown. Such congenital melanocytic nevi are present at birth or develop shortly thereafter and are characterized by their size, with larger nevi carrying a higher risk for melanoma development later in life. The presence of a birthmark of this nature, particularly when it is confined to a single area and has the distinctive pigmentation patterns consistent with melanocytic nevi, strongly indicates this diagnosis. It covers a significant portion of the newborn's leg, suggesting a large or giant size, which may warrant closer surveillance due to the increased risk of complications associated with larger congenital nevi.



Done

### AI Symptom analysis and Image understanding \*

	1	2	3	4	5	
Weak	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	Great

### AI Diagnostic Reasoning \*

	1	2	3	4	5	
Weak	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	Great

#### Question Dermnet

**question:**A 12-day-old neonate presents with a large thickened area of skin discoloration on the back.

On examination, there were large, indurated, red-brown violaceous plaques with multiple discrete lumps on the back.

**Diagnoses and explanation:**Subcutaneous fat necrosis of the newborn. This is an uncommon panniculitis of neonates. It usually occurs in the first days of life. There has often been fetal distress in labour and it may be associated with therapeutic hypothermia for hypoxic ischaemic encephalopathy. It can be painful. It usually, ultimately, self-resolves.

## AI generated Response

Diagnosis: Congenital Hemangioma

Clinical Features Supporting Diagnosis:

- Age of onset: The patient is a neonate, which is a common age group for the appearance of congenital hemangiomas.
- Lesion characteristics: The image displays a large, indurated (thickened) area with a red-brown violaceous color, which is consistent with the presentation of a vascular lesion such as a hemangioma.
- Morphology: The presence of plaques with multiple discrete lumps on the back is indicative of a vascular tumor presenting since birth.
- Congenital hemangiomas are fully formed at birth and often present as large, solitary, well-demarcated lesions which can be nodular on palpation, befitting the description provided.

Congenital hemangiomas come in two main types: rapidly involuting congenital hemangioma (RICH), which usually regresses without treatment by age one, and non-involuting congenital hemangioma (NICH), which usually does not regress. The provided information is not sufficient to distinguish between the two, but both are types of congenital hemangioma.



Done

### AI Symptom analysis and Image understanding \*

	1	2	3	4	5	
Weak	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	Great

### AI Diagnostic Reasoning \*

	1	2	3	4	5	
Weak	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	Great

### Question Dermnet

**question:**A 12-year-old boy with a history of atopic dermatitis presents with bilateral, itchy, swollen, and painful nipples.

**Diagnoses and explanation:**This is nipple eczema. It is a localised dermatitis involving the nipple and areola. This is frequently bilateral and fluctuates in severity. Lichenification due to scratching can be conspicuous, as can hyperpigmentation, particularly in skin of colour. It improves in response to topical steroids and can deteriorate rapidly when irritated by scratching, soaps, shower gels, and detergents.

Nipple eczema is a common local manifestation of atopic dermatitis but can occur in isolation.

## AI generated Response

Diagnosis: Eczematous dermatitis of the nipple (nipple eczema/atopic dermatitis)

Clinical Features Supporting Diagnosis:

- History of atopic dermatitis: The patient has a known background of atopic dermatitis, which is a common chronic, inflammatory skin condition that can affect various parts of the body, including the nipples.
- Bilateral involvement: Atopic dermatitis commonly presents in a symmetrical pattern, affecting both sides of the body, as seen here with the involvement of both nipples.
- Itchiness (pruritus): One of the hallmarks of atopic dermatitis is severe itching, which often leads to scratching and further inflammation.
- Swollen and painful nipples: The swelling and pain can be a result of inflammation and irritation caused by the disease process itself, as well as secondary to scratching and rubbing.
- Appearance of the skin: The image shows nipples with lichenified skin (thickened, with exaggerated skin lines), which is often seen with chronic eczema due to persistent itching and rubbing.

The combination of these clinical features in the context of the patient's medical history is highly suggestive of eczematous dermatitis of the nipple, likely as a manifestation of his underlying atopic dermatitis.



Done

### AI Symptom analysis and Image understanding \*

1 2 3 4 5

Weak      Great

### AI Diagnostic Reasoning \*

1 2 3 4 5

Weak      Great

### Question Dermnet

**question:**A 50-year-old Afghan female presents with a 3-month history of progressive, painful ulcers overlying the right medial malleolus, right dorsal hand, and right lateral chin. There was no mucosal involvement.

She had a history of cutaneous leishmaniasis, with similarly distributed lesions. These were successfully treated in Afghanistan some years ago. She migrated to Australia 6 months ago and has been otherwise well since.

**Diagnoses and explanation:**Cutaneous leishmaniasis – the patient is from an endemic region and has a positive past history. Leishmaniasis recidivans (LR) should be considered given that there is facial involvement and multiple lesions distributed over previously healed lesions.

Anthrax – endemic to Afghanistan and cutaneous anthrax is the most common presentation.



Lupus vulgaris – chronic direct infection of the skin with tuberculosis.

Atypical mycobacterial infection – *M. fortuitum* and *M. chelonae* are both found in Afghanistan and may cause skin ulcers.

## AI generated Response

Diagnosis: Cutaneous Leishmaniasis

Clinical Features Supporting Diagnosis:

The images show well-defined, ulcerated lesions with raised borders and granulating tissue in the base, commonly associated with cutaneous leishmaniasis. The presence of similarly distributed lesions that were treated in Afghanistan, where leishmaniasis is endemic, supports a diagnosis of recurrent or relapse of the disease. It is possible that the parasites persisted at low levels following the initial treatment and re-emerged when triggered, perhaps by the stress of relocation or other factors. The absence of mucosal involvement is also consistent with the cutaneous form of the disease.

There is no other history suggestive of recent exposures or new medications that would suggest an alternative etiology such as a drug reaction or environmental cause. The chronicity and progression of the lesions also point away from more acute processes like bacterial infections or hypersensitivity reactions. Therefore, the most probable cause of these ulcerations, given the history and appearance, is cutaneous leishmaniasis.



Done

### AI Symptom analysis and Image understanding \*

	1	2	3	4	5	
Weak	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	Great

### AI Diagnostic Reasoning \*

	1	2	3	4	5	
Weak	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	Great

### Question Dermnet

**question:**This forty-six year old lady has had a pink weeping lesion under her chin for the last eight months.

It has not responded to an antibiotic cream and a course of amoxicillin by mouth.

**Diagnoses and explanation:**This is a granuloma resulting from a dental sinus. They arise when there is longstanding dental abscess or necrosis of a tooth. When a dental sinus connects with the skin rather than the intraoral mucosa, they characteristically occur along the border of the mandible, but may also arise around the maxilla. The tethering of the skin around the sinus opening is a feature and may be appreciated either visually or on palpation.

## AI generated Response

Diagnosis: Basal Cell Carcinoma (BCC)

### Clinical Features Supporting Diagnosis:

The lesion under the chin appears as a pink, slightly pearly nodule with a central depression and visible telangiectatic (small dilated blood vessels) on the surface. The fact that the lesion is weeping could indicate ulceration, a common feature in some types of BCC. Basal Cell Carcinomas typically do not respond to antibiotics because they are not caused by bacteria. The chronic duration of 8 months without resolution and non-responsiveness to antibiotic treatment further substantiates the likelihood of BCC. In addition, BCC frequently develops in areas exposed to sunlight, and while the under chin area is less commonly exposed, it is not exempt from UV radiation, especially in individuals with certain outdoor habits or occupations.

It is essential to follow-up with a dermatologist for a skin biopsy to confirm the diagnosis and receive appropriate treatment, which may include surgical removal or other modalities depending on the size, depth, and location of the lesion.



Done

### AI Symptom analysis and Image understanding \*

	1	2	3	4	5	
Weak	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Great

### AI Diagnostic Reasoning \*

	1	2	3	4	5	
Weak	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Great

### Question Dermnet

**question:**This 80-year-old man has had large crusted lesions over his bald anterior scalp for some months. A large scab has been removed revealing the appearance seen in the photograph.

**Diagnoses and explanation:**The picture is typical of erosive pustular dermatosis of the scalp. It is seen mostly in older bald men with sun damaged scalps.

## AI generated Response

Diagnosis: Squamous cell carcinoma (SCC) of the scalp.

Clinical Features Supporting Diagnosis:

- The patient's age (80 years old) is a significant risk factor for SCC.
- The location on the scalp, particularly on a bald area with probable sun exposure history, suggests a strong possibility of actinic damage leading to SCC.
- The clinical photograph shows a large lesion with irregular borders, erythematous base, and a heterogeneous surface with areas of yellowish keratinous material which could represent cutaneous horn—a common feature of SCC.
- The chronicity of the lesion (present for months) and the presence of a large, crusted surface that when removed reveals a raw area is consistent with non-healing wounds typical of SCC.
- The appearance of the lesion after debridement with various areas of erosion, crusting, and potential tissue destruction provide further visual support for SCC.

Squamous cell carcinoma is a common skin cancer that often arises in areas of chronic sun exposure and can appear as crusted or scaly areas with a red inflamed base that can become open sores over time. Given the patient's age, lesion characteristics, and prolonged duration, SCC is the most probable diagnosis.



Done

### AI Symptom analysis and Image understanding \*

	1	2	3	4	5	
Weak	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	Great

### AI Diagnostic Reasoning \*

	1	2	3	4	5	
Weak	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	Great

### Question Dermnet

**question:** This 18-year-old man has had a rash on his abdomen for 8 months. Mycology has been negative on 3 occasions and it has not responded to oral itraconazole..

**Diagnoses and explanation:** The features are typical of confluent and reticulated papillomatosis. It is frequently misdiagnosed as pityriasis versicolor, but mycology is negative and oral azoles are not as effective as tetracycline antibiotics..

## AI generated Response

Diagnosis: Pityriasis Rosea

Clinical Features Supporting Diagnosis:

Pityriasis rosea is a self-limiting, inflammatory skin condition that presents typically with a herald patch followed by a distinctive pattern of similar but smaller oval red patches that spread over the trunk and limbs. The rash commonly follows the cleavage lines of the skin, presenting in a 'Christmas tree' pattern, particularly on the back.

The appearance of the rash in the image shows a cluster of oval, erythematous patches with a fine scale, commonly associated with pityriasis rosea. Although the herald patch is not visible and mycological tests have been negative, this can still be consistent with pityriasis rosea, as the condition is not caused by a fungal infection and thus would not respond to antifungal treatment such as oral itraconazole. Furthermore, it is common for patients and practitioners to initially suspect a fungal infection due to the similar appearance, which can lead to unnecessary antifungal treatments.

The chronicity of the rash (8 months) is longer than usual for pityriasis rosea, which typically resolves within 6 to 8 weeks, but atypical and prolonged cases can occur.

Note: A definitive diagnosis should always be confirmed by a medical professional through appropriate tests and evaluations, including ruling out other potential causes for the rash.



Done

**AI Symptom analysis and Image understanding \***

1                      2                      3                      4                      5

Weak                                                                                                                                    Great

**AI Diagnostic Reasoning \***

1                      2                      3                      4                      5

Weak                                                                                                                                    Great

Question **Dermnet**

**question:**This 69-year-old woman has noticed a rash over her upper chest in the last 2 years. It is



non-itchy.

She has long-standing hypertension, and takes a calcium channel blocker and an ACE inhibitor for this. Her liver function tests are normal..

**Diagnoses and explanation:**The likely cause is amlodipine-induced phototelangiectasia.

Telangiectasia in light-exposed areas has been reported with nifedipine and diltiazem, although it has had a more common association with amlodipine. In some cases, its resolution has been noted after substitution of the calcium channel antagonist with a different class of antihypertensive.

## AI generated Response

Diagnosis: Actinic Keratosis

Clinical Features Supporting Diagnosis:

- The patient's age (69 years old) makes her more susceptible to sun-induced skin changes.
- The presence of a rash on her upper chest, an area commonly exposed to the sun, suggests a likelihood of actinic damage.
- The description of the rash as non-itchy aligns with actinic keratosis, which is often asymptomatic.
- The image shows an area of erythematous (reddish) patches with some scaling, which is characteristic of actinic keratosis.
- The gradual development over 2 years can also be consistent with the slow evolution typically seen in actinic keratosis.
- The normal liver function tests help to rule out systemic causes for the skin findings.
- Her medications, including a calcium channel blocker and an ACE inhibitor, are not typically associated with drug-induced photosensitivity reactions which would present differently and usually would not persist over two years without changes.

Actinic keratosis is a result of long-term exposure to ultraviolet (UV) light and is considered a precancerous skin condition that could potentially lead to squamous cell carcinoma if untreated.



Done

**AI Symptom analysis and Image understanding \***

Weak      1      2      3      4      5      Great

**AI Diagnostic Reasoning \***

Weak      1      2      3      4      5      Great

Question **Dermnet**

**question:**This 33-year-old man presented in the summer with a streaky rash over his trunk of 2 days

duration. In some areas, it is starting to blister. He denies any drug ingestion.

**Diagnoses and explanation:** This is typical of a phytophotodermatitis, a rash that results from a phototoxic plant sap coming into contact with the skin, and subsequent light exposure. It results in redness and sometimes blistering of the exposed skin.

## AI generated Response

Diagnosis: Contact Dermatitis

Clinical Features Supporting Diagnosis:

- The image shows an erythematous, streaky rash with areas of blistering, which is indicative of an acute skin reaction. The linear nature of the rash suggests exposure to an external irritant or allergen, possibly from plants like Toxicodendron species (poison ivy, poison oak, or poison sumac).
- Since the patient presents with these symptoms in the summer and denies any drug ingestion, it is more likely that he has come into contact with an environmental allergen rather than a drug-induced reaction.
- The absence of systemic symptoms and the localized nature of the rash predominantly on the trunk, which could be covered by a shirt, point toward an externality that has brushed against the skin, causing a classic dermatitic reaction pattern.
- The rapid onset of the rash (2 days duration) and initiation of blister formation indicate a robust acute inflammatory response. A contact allergen would typically induce this type of presentation upon re-exposure (sensitization having occurred on previous contact).

While it is crucial to consider other acute inflammatory skin conditions, the clues provided, including the lack of systemic symptoms, the absence of drug ingestion, and the presence of a linear streaky rash with blistering that matches the pattern of contact dermatitis, lead to this diagnosis.



Done

### AI Symptom analysis and Image understanding \*

1                      2                      3                      4                      5

Weak                                                                                                                                    Great

### AI Diagnostic Reasoning \*

1                      2                      3                      4                      5

Weak                                                                                                                                    Great

Question Dermnet

**question:**This 35-year-old woman has had three episodes of redness and blistering affecting the

same area on only one foot in the last four years.

Her only other medical problem is recurrent urinary tract infections..

**Diagnoses and explanation:**The recurrent development of redness and blistering in exactly the same place on the skin is very suggestive of a fixed eruption, most commonly caused by drugs. Occasionally they can be caused by foodstuffs, preservatives and other food and beverage additives. Lesions may be solitary or multiple. Uncommon sites to develop fixed eruptions are the lids, lips, palms, soles, and genitalia.

They frequently arise within minutes or hours after exposure to the offending agent, once sensitisation has occurred. When they resolve, they commonly leave areas of hyperpigmentation.

## AI generated Response

Diagnosis: Fixed Drug Eruption

Clinical Features Supporting Diagnosis:

- The clinical image shows well-demarcated, round erythematous patches with a central bullous or blistering reaction, which is characteristic of a fixed drug eruption.
- The episodic nature of redness and blistering that affects the same area repeatedly upon exposure to the causative drug is also a typical feature of fixed drug eruptions.
- The patient's history of recurrent urinary tract infections may indicate periodic use of certain medications, such as antibiotics, which could be the causative agent for the fixed drug eruption.
- Fixed drug eruptions tend to recur at the same site with each exposure to the offending drug and can present with either a single or multiple lesions.
- There is no mention of the involvement of other skin areas or systemic symptoms, which helps narrow down the differential diagnosis to localize skin reactions rather than generalized skin conditions or systemic diseases.

Given the lack of other relevant medical history or systemic involvement, the most probable cause of the recurrent, localized skin reaction is a fixed drug eruption likely triggered by a medication used to treat her urinary tract infections.



Done

### AI Symptom analysis and Image understanding \*

1 2 3 4 5

Weak      Great

### AI Diagnostic Reasoning \*

1 2 3 4 5

Weak      Great

### Question Dermnet

**question:** This elderly man is undergoing terminal care – he is receiving opiates for pain relief. He has developed constipation and overflow incontinence. In the last few days, he has developed this florid rash on his posterior thighs.

**Diagnoses and explanation:** Sadly, his opiates have constipated him, and this has been treated with co-danthrusate (dantron and docusate), an anthralin-like agent that acts as a stimulant laxative.

It is metabolised in the gut to anthralin, and when there is accidental contact with faeces and the skin, it produces an irritant dermatitis. It may oxidise to a purple-brown colour just as anthralin (dithranol) does in the treatment of psoriasis.

## AI generated Response

Diagnosis: Incontinence-associated dermatitis (IAD)

### Clinical Features Supporting Diagnosis:

The history and presentation in the image suggest incontinence-associated dermatitis (IAD). IAD is an inflammation of the skin that occurs when urine or stool comes into prolonged contact with the skin, often seen in patients with incontinence issues, as described in this patient's history.

The presence of a florid rash on the posterior thighs, which are common locations affected by incontinence, supports this diagnosis. The rash's characteristics include erythema (redness of the skin), which can potentially progress to more severe skin damage if left untreated or if exposure to irritants continues. Given the patient's situation, being bedridden and having overflow incontinence increases the risk and prevalence of such dermatological problems due to constant exposure to irritants and less frequent position changes. The presence of opiates could contribute to constipation and resultant fecal incontinence, thus increasing skin exposure to irritants.

The appearance of the rash as diffuse areas of redness, without a clear pattern characteristic of other specific dermatoses, suggests a diagnosis of IAD rather than other causes, such as a fungal infection or pressure ulcers, which typically have a more localized and distinctive appearance.



Done



### AI Symptom analysis and Image understanding \*

	1	2	3	4	5	
Weak	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	Great

### AI Diagnostic Reasoning \*

	1	2	3	4	5	
Weak	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	Great

### Question Dermnet

**question:** This 80-year-old lady has atrial fibrillation and has been on warfarin for 2 years. Her anticoagulation control has been erratic in the last months.

She has developed extremely painful, bruised areas on her leg in the last 48 hrs..

**Diagnoses and explanation:** These acute haemorrhagic lesions are the early stages of coumarin necrosis.

## AI generated Response

Diagnosis: Warfarin-induced skin necrosis

Clinical Features Supporting Diagnosis:

The patient's history of erratic anticoagulation control while on warfarin, combined with the acute development of extremely painful, bruised areas on her leg, suggests warfarin-induced skin necrosis. This is a rare complication associated with warfarin therapy. Clinical features that support this diagnosis include:

1. **Timing:** The onset of symptoms typically occurs within a few days to weeks after initiating warfarin therapy, or in the case of someone with established treatment, it may be associated with episodes of over-anticoagulation.
2. **Appearance:** The lesions often start as painful, erythematous patches that progress to form petechiae, and then develop into a characteristic bruised appearance, as seen in the image.
3. **Distribution:** The lesions are most commonly found on areas with relatively high subcutaneous fat content, such as the thighs and breasts, but the extremities can also be involved.
4. **Risk Factors:** The patient's advanced age and the presence of a condition requiring anticoagulation (atrial fibrillation) are factors that increase the risk of complicated warfarin therapy.

The appearance of the skin lesions, with areas of ecchymosis and central necrosis, strongly indicates warfarin-induced skin necrosis. This condition is a medical emergency that requires immediate attention, and often the discontinuation of warfarin and the initiation of alternative anticoagulation, along with supportive care and possibly surgical intervention for any necrotic tissue.



Done

**AI Symptom analysis and Image understanding \***

	1	2	3	4	5	
Weak	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	Great

**AI Diagnostic Reasoning \***

	1	2	3	4	5	
Weak	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	Great

Question **Dermnet**

**question:**This 20-year-old woman has noticed that the skin under both eyes has changed over the

last few years.

**Diagnoses and explanation:** These are typical syringomas (syringomata) in the most frequently encountered location. They occasionally develop in the bathing trunk area and on the upper trunk. They are benign tumours of the sweat duct; they may be familial.

Unlike xanthelasma, which tend to produce plaques, syringomas remain as discrete papules.

## AI generated Response

Diagnosis: Syringoma

Clinical Features Supporting Diagnosis:

Syringoma is a benign adnexal neoplasm formed by well-differentiated ductal elements. The image shows multiple, small, flesh-colored to yellowish papules localized on the lower eyelid area, which is a common site for syringoma. There is no evidence of inflammation or infection. They are often symmetrically distributed and can sometimes be evident during adolescence or early adulthood, which correlates with the patient's age and history of noticing the changes over a few years.

These papules are typically asymptomatic. The progressive and gradual change, the location, the appearance of the papules, and the patient's age are all consistent with a diagnosis of syringoma. Syringomas can increase in number and size with time, and though they are benign, they may cause cosmetic concerns.



Done

### AI Symptom analysis and Image understanding \*

	1	2	3	4	5	
Weak	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	Great

### AI Diagnostic Reasoning \*

	1	2	3	4	5	
Weak	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	Great

### Question Dermnet

**question:**This 55-year-old woman has a 3-month history of an unusual eruption over her trunk and limbs. She is otherwise well.

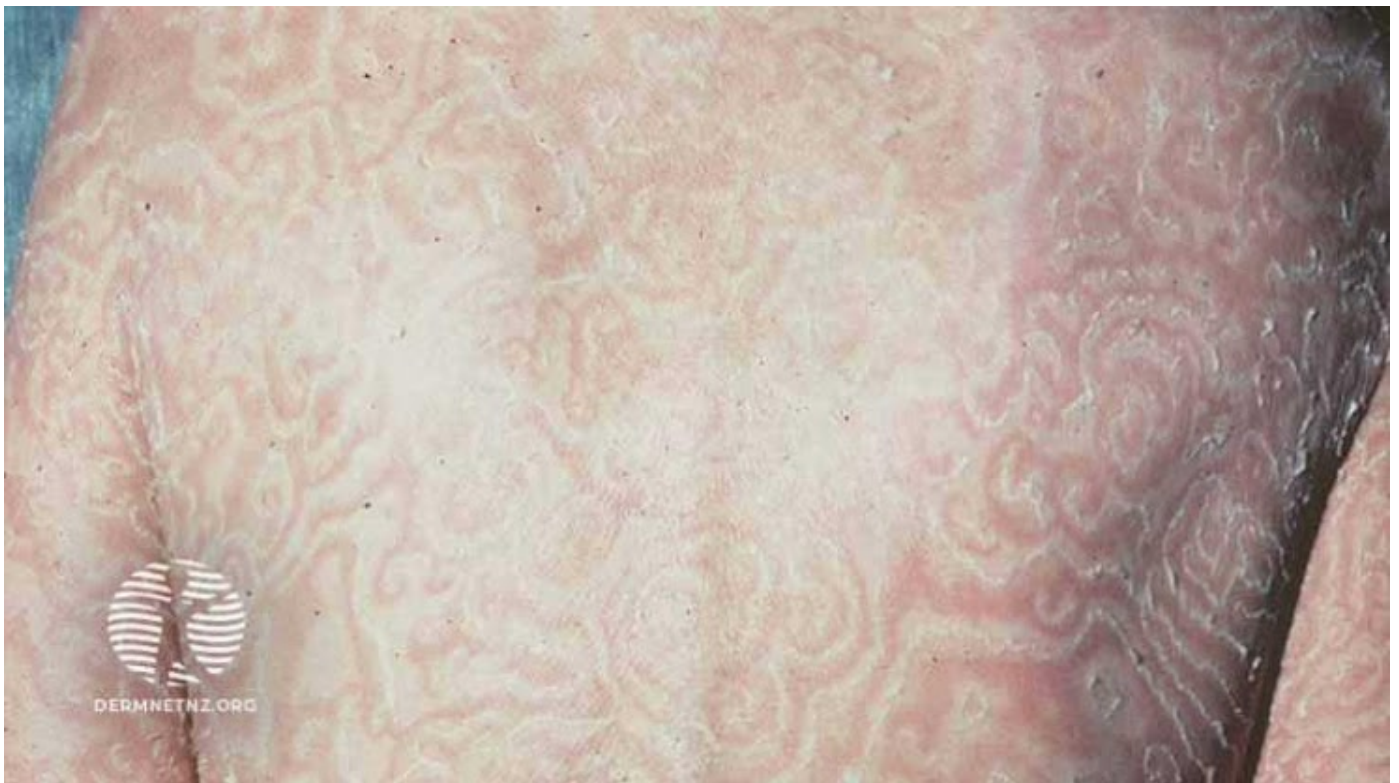
**Diagnoses and explanation:**The eruption shows the classical “wood graining” with redness and scale of erythema gyratum repens. The erythema slowly spreads in a gyrate fashion, leaving scale on the trailing edge of the advancing edge. The term repens probably best translates as “creeping.”.

## AI generated Response

Diagnosis: Erythema Annulare Centrifugum (EAC)

### Clinical Features Supporting Diagnosis:

The image provided shows a pattern of erythematous, annular plaques with trailing scale on the inner edge, which is typical for Erythema Annulare Centrifugum. These lesions tend to exhibit central clearing and spread centrifugally, which gives them a ring-like appearance. The distribution over the trunk and limbs is also consistent with EAC. The patient's history of being otherwise well aligns with the often idiopathic nature of EAC, and the chronic course over 3 months fits the profile of this diagnosis since EAC can persist for weeks to months if untreated. Other potential diagnoses like a fungal infection (tinea corporis) or psoriasis may present with similar ring forms but often have different scales, distribution, and patient symptoms. The absence of other systemic symptoms also points away from conditions associated with systemic issues.



Done

### AI Symptom analysis and Image understanding \*

	1	2	3	4	5	
Weak	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	Great

### AI Diagnostic Reasoning \*

	1	2	3	4	5	
Weak	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	Great

### Question Dermnet

**question:**This 6-year-old boy has problems with both feet – they are dry and split producing painful fissures.

**Diagnoses and explanation:**The forefoot is dry, red and fissured; the typical features of juvenile plantar dermatosis.

It occurs more commonly in boys with an average age of onset of 8. It is more common in atopic children.



## AI generated Response

Diagnosis: Juvenile Plantar Dermatitis

Clinical Features Supporting the Diagnosis:

The image provided shows a child's foot with dry, thickened skin and deep fissures, particularly over the pressure points of the sole and around the toe joints. Juvenile plantar dermatosis is a skin condition that commonly affects children between the ages of 3 and 14. It is characterized by dry, scaly, and fissured skin on the sole of the foot, often concentrated on weight-bearing areas. The condition is also known as "sweaty sock syndrome," as it is thought to be related to occlusive footwear and moisture, which creates a warm environment conducive to the development of the dermatosis. It typically does not involve the presence of an infectious agent, which helps to distinguish it from other conditions such as tinea pedis (athlete's foot).

The appearance of the skin in this case, presenting with redness, scaling, fissuring without significant inflammation or signs of infection, fits the clinical presentation of juvenile plantar dermatosis. The age of the patient and the symmetric involvement of both feet also support this diagnosis.



Done

### AI Symptom analysis and Image understanding \*

	1	2	3	4	5	
Weak	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	Great

### AI Diagnostic Reasoning \*

	1	2	3	4	5	
Weak	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	Great

### Question Dermnet

**question:**A 50-year-old man presented with a 3-month history of firm tumour-like nodules on his face, scalp, back, arms and legs, approximately 1-5 cm in diameter but increasing in size. Some had started to ulcerate.

There were no skin changes preceding the tumour development and the lesions were otherwise asymptomatic. Medical and drug history was unremarkable with no other systemic symptoms and routine blood tests were normal.

Biopsy showed neoplastic proliferation of lymphoid cells, positive for CD3, CD4, CD5, CD20 and negative for CD8 and CD30.

**Diagnoses and explanation:**Differential diagnoses include:

Sarcoidosis

Multiple disseminated keratoacanthoma-like nodules

Cutaneous B-cell lymphoma.

Biopsy however, suggested a malignant T-cell lymphoma, and the development of tumours without preceding patches or plaques is the presentation of tumour d'emblee mycosis fungoides.

Tumours are the initial presentation in only 10% of patients with mycosis fungoides. They commonly eventually ulcerate.

## AI generated Response

Diagnosis: Cutaneous T-cell lymphoma (CTCL), most likely mycosis fungoides (MF) with tumorous stage.

Clinical Features Supporting the Diagnosis:

- The patient has firm, tumor-like nodules on multiple areas of the body, including the face, scalp, back, arms, and legs. The distribution is not limited to sun-exposed areas, which is consistent with CTCL.
- The nodules have also been described as increasing in size, and some have ulcerated. Ulceration can be seen in the advanced tumorous stage of mycosis fungoides, a type of CTCL.
- There are no preceding skin changes and the lesions are described as otherwise asymptomatic, which can be seen in CTCL as it can present with relatively mild symptoms despite a serious underlying disease.
- The histological findings from the biopsy as described are highly characteristic of CTCL: neoplastic proliferation of lymphoid cells. The immunophenotype with positivity for CD3, CD4, CD5, CD20, and negativity for CD8 and CD30 also supports the diagnosis of CTCL, as these markers are typically found on the neoplastic T-cells of CTCL.
- Routine blood tests were normal, which is also common in CTCL, especially in the early stages or until the disease becomes widespread.
- The lack of systemic symptoms is typical in CTCL, as it initially presents primarily with cutaneous manifestations.

Considering the clinical features and biopsy findings, CTCL is the most probable diagnosis, with the subtype likely being mycosis fungoides due to the tumorous nodules and lymphoid proliferation identified on biopsy.



Done

### AI Symptom analysis and Image understanding \*

Weak      1      2      3      4      5      Great

### AI Diagnostic Reasoning \*

Weak      1      2      3      4      5      Great

### Question Dermnet

**question:** This 60-year-old man has noticed a change in the appearance of one thumbnail. The rest of his nails are normal and there is no history of skin disease.

**Diagnoses and explanation:** This is a habit-tic nail deformity. It is caused by frequent subconscious picking of the proximal nail fold either from the adjacent or the contralateral index finger. The repetitive pushing back of the cuticle results in minor trauma to the nail matrix; secondary rippled central dystrophy subsequently develops.

## AI generated Response

Diagnosis: Onychomycosis

Clinical Features Supporting Diagnosis:

The image of the 60-year-old man's thumbnail shows several characteristic features indicative of onychomycosis, a fungal infection of the nail. These features include:

- **Nail discoloration:** The nail shows yellowish-brown streaks and areas of discoloration, which often signal a fungal infection beneath the nail plate.
- **Subungual hyperkeratosis:** There is apparent thickening of the nail, with the presence of debris under the nail, suggestive of subungual hyperkeratosis, which occurs when there is an accumulation of keratinous material under the nail as a result of fungal overgrowth.
- **Onycholysis:** There is some separation of the nail from the nail bed (onycholysis), and this can be a result of the fungal infection pushing the nail plate away from its bed.
- The nail's dystrophic appearance (its rough texture and lack of shine) also points towards a chronic condition affecting the nail's growth and health, such as onychomycosis.

The lack of other skin problems or a history of skin disease, along with the localized change to just one nail, further supports the diagnosis of a localized fungal infection rather than a systemic or generalized skin condition.



Done

### AI Symptom analysis and Image understanding \*

1 2 3 4 5  
Weak      Great

### AI Diagnostic Reasoning \*

1 2 3 4 5  
Weak      Great

Question Dermnet

**question:**This seven-day-old girl has developed a rash distributed only on the left forearm in the last

few days. There are some vesicles and pustules, and a biopsy of one of these has shown an epidermal vesicle full of eosinophils.

**Diagnoses and explanation:** This is the early vesicular phase of incontinentia pigmenti, an inherited condition which affects the skin, eyes, teeth, and central nervous system.

## AI generated Response

Diagnosis: Incontinentia Pigmenti (IP)

Clinical Features Supporting Diagnosis:

- Age and Sex: Incontinentia pigmenti is a genetic disorder that typically affects females and usually becomes apparent soon after birth, which aligns with this patient being a seven-day-old girl.
- Rash Distribution: The localized distribution of the rash, in this case on the left forearm, could be consistent with the early blistering stage of incontinentia pigmenti, which tends to follow lines of Blaschko, reflecting embryonic development patterns.
- Vesicles and Pustules: The presence of vesicles and pustules on the skin is typical of the vesiculobullous stage of IP, which is the second stage of the condition and occurs during the neonatal period.
- Histopathological Findings: The biopsy showing an epidermal vesicle full of eosinophils is characteristic of IP. Histology findings usually show eosinophil-rich inflammatory infiltrates within the vesicles.

The hallmark findings for IP include skin abnormalities that progress through stages: an inflammatory blistering phase, a verrucous stage, and a final stage of hyperpigmented swirling macules following the lines of Blaschko. Not all patients will experience all stages, but the presence of eosinophil-rich vesicles in a female infant suggests IP as the most probable diagnosis. Genetic testing can confirm the diagnosis, as IP is usually associated with mutations in the IKBKG (also known as NEMO) gene.





Done

**AI Symptom analysis and Image understanding \***

Weak      1      2      3      4      5      Great

**AI Diagnostic Reasoning \***

Weak      1      2      3      4      5      Great

Question Dermnet

**question:**This 40-year-old lady has developed an itchy eruption over her neck and upper back. It has

not improved with the use of emollients and topical steroids.

**Diagnoses and explanation:** These features are typical of macular amyloidosis, a reaction that is thought to result from perpetual scratching of the affected areas. It is common in both men and women of Asian heritage.

## AI generated Response

Diagnosis: Tinea versicolor (Pityriasis versicolor)

Clinical Features Supporting Diagnosis:

- The image shows hypopigmented and slightly hyperpigmented, well-demarcated patches with a fine scale on the neck and upper back, which are characteristic of tinea versicolor.
- The distribution of the eruption across the upper trunk is common for tinea versicolor, as this area is rich in sebaceous glands which provide the lipid-rich environment preferred by the yeast *Malassezia*, the causative organism of this condition.
- Tinea versicolor typically presents with itching, which aligns with the patient's complaint of an itchy eruption.
- The lack of response to emollients and topical steroids also supports the diagnosis, as these treatments do not target the yeast causing tinea versicolor. Antifungal therapy is required for treatment.

It is important to note that this diagnosis is based on provided history and observable features in the context of a hypothetical scenario. In a real-life situation, confirmation by KOH preparation, culture, or other diagnostic methods would be essential.



Done

**AI Symptom analysis and Image understanding \***

	1	2	3	4	5	
Weak	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	Great

**AI Diagnostic Reasoning \***

	1	2	3	4	5	
Weak	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	Great

Question Dermnet

**question:**This 55-year-old woman has developed a groove along one of her fingernails. She has

noticed intermittent discharge from underneath the cuticle of a clear, sticky material.

**Diagnoses and explanation:** The groove has been caused by pressure from a myxoid cyst (digital mucous cyst) which overlies the nail matrix. Pressure applied to the nail matrix from any cause will result in either a line or groove in the nail plate distally.

## AI generated Response

Diagnosis: Myxoid Cyst (Digital Mucous Cyst)

Clinical Features Supporting Diagnosis:

The image shows a dome-shaped protrusion near the proximal nail fold, which is characteristic of a myxoid cyst, also known as a digital mucous cyst. These cysts are benign, myxomatous lesions that typically present adjacent to the nail matrix. The groove along the nail - in medical terms, a longitudinal depression or ridging - is indicative of pressure or damage to the nail matrix often caused by the cyst. The intermittent discharge described by the patient is consistent with the gelatinous, clear, sticky material typically found in myxoid cysts when they rupture or leak.



Done

### AI Symptom analysis and Image understanding \*

	1	2	3	4	5	
Weak	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	Great

### AI Diagnostic Reasoning \*

	1	2	3	4	5	
Weak	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	Great

### Question Dermnet

**question:**This 12-year-old boy has developed changes affecting the nails of his hands and feet. Repeated mycology has proved negative. He has no skin problems elsewhere.

**Diagnoses and explanation:**This may be associated with previous, concurrent, or the ultimate development of alopecia areata or lichen planus. Evidence of these conditions should be sought in the scalp, mouth, and elsewhere on the skin. Less convincing associations are with psoriasis and eczema.

## AI generated Response

Diagnosis: Psoriasis

### Clinical Features Supporting Diagnosis:

The image shows nail changes characterized by pitting, onycholysis (separation of the nail bed), and discoloration, which are common manifestations of nail psoriasis. The yellowish-brown discoloration can be seen, particularly in toe nails, which suggests the presence of oil spots, another hallmark of nail psoriasis. Despite the repeated negative mycology, suggesting that fungal infection is unlikely, these nail changes persist, which is consistent with nail psoriasis. Psoriasis can occur in the absence of skin lesions elsewhere, particularly in children. The age of the patient and the type of nail changes (given that other etiologies like trauma or lichen planus are less likely) strengthen the likelihood of this diagnosis.



Done

### AI Symptom analysis and Image understanding \*

	1	2	3	4	5	
Weak	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	Great

### AI Diagnostic Reasoning \*

	1	2	3	4	5	
Weak	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	Great

### Question Dermnet

**question:**This 65-year-old man has developed an unusual rash on his face. It has been present for 3 months. He is on medication for diabetes and nocturnal cramps..

**Diagnoses and explanation:**The eruption has a violaceous hue, and the area covered by his hat and shirt (below the collar line) is spared. These features together suggest a photolichenoid eruption..

## AI generated Response

Diagnosis: Actinic Keratosis

Clinical Features Supporting Diagnosis:

The image shows the presence of multiple well-demarcated, erythematous plaques with a scaly, crusty surface on sun-exposed areas of the face. Actinic keratosis (AK) is considered a premalignant condition characterized by keratotic lesions on sun-damaged skin. These lesions are typically seen in older adults due to the cumulative exposure to ultraviolet (UV) radiation over many years.

The man's age (65 years old) aligns with the typical age range for actinic keratosis, and the chronicity of the rash (3 months) is consistent with the slow development of these lesions. Furthermore, having diabetes or being on certain medications may subtly impact immune system function, potentially influencing the skin's response to UV damage and the development of AKs.

The distribution of the rash on the face, a sun-exposed area, adds to the likelihood that these lesions are actinic keratoses. The appearance of multiple lesions can indicate extensive sun damage and increases the importance of monitoring due to the risk of progression to squamous cell carcinoma, a type of skin cancer. In this case, the man should be referred to a dermatologist for further evaluation and management, which may include cryotherapy, topical treatments, or photodynamic therapy, depending on the number and extent of lesions. Regular follow-up is essential to monitor changes to the lesions.





Done

### AI Symptom analysis and Image understanding \*

	1	2	3	4	5	
Weak	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	Great

### AI Diagnostic Reasoning \*

	1	2	3	4	5	
Weak	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	Great

### Question Dermnet

**question:** This 58-year-old man has developed thick purple/red tight skin on his upper back, over the last three months. He is otherwise well and does not take any medication. In particular, he has not had symptoms of Raynaud phenomenon.

**Diagnoses and explanation:** This is scleroedema (U.S. scleredema), not to be confused with scleroderma. It occurs as a result of the accumulation of mucin in the dermis..

## AI generated Response

Diagnosis: Morphea (Localized Scleroderma)

Clinical Features Supporting Diagnosis:

- The image shows a large patch of thickened skin on the upper back that is purple/red in color, which is characteristic of morphea.
- Morphea is a localized form of scleroderma, which causes sclerosis of the skin and sometimes the underlying tissues, leading to the appearance of hard, tight skin.
- The patient's lack of systemic symptoms and the absence of Raynaud phenomenon make systemic scleroderma less likely. Morphea does not have the systemic features that are common in scleroderma, such as Raynaud phenomenon, which is this patient's case.
- The gradual development over months and the localized nature of the symptoms support the diagnosis of morphea rather than a systemic condition.
- Morphea typically presents with an initial inflammatory phase characterized by red-purple discoloration, followed by a sclerotic phase where the skin becomes thickened and hard, as seen in this patient.

The patient's age and the clinical features described in the history and observed in the image align with the diagnosis of morphea.



Done

### AI Symptom analysis and Image understanding \*

	1	2	3	4	5	
Weak	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	Great

### AI Diagnostic Reasoning \*

	1	2	3	4	5	
Weak	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	Great

### Question Dermnet

**question:** This patient, now in her early 60s, is concerned about the appearance of her nails. Over the years she has found that they grow much more slowly than when she was younger.

**Diagnoses and explanation:** The nail plates are yellow in colour, and have excessive transverse and longitudinal curvature. These features are typical of yellow nail syndrome, and patients usually describe the need to only infrequently cut their nails as the nail growth rate is substantially slower than normal.

## AI generated Response

Diagnosis: Onychomycosis

Clinical Features Supporting Diagnosis:

On the provided image, the nails exhibit several notable changes that are characteristic of onychomycosis, which is a fungal infection of the nails. These changes include:

1. **Nail Discoloration:** The nails have a yellowish hue, a common symptom of onychomycosis, where the fungus leads to the production of pigmented debris under the nail plate.
2. **Nail Thickening:** The nails appear to be thicker than normal, which often occurs in onychomycosis due to the buildup of fungal elements and debris under the nail.
3. **Subungual hyperkeratosis:** There seems to be an accumulation of keratinous material beneath the distal portion of the nail plate. This can cause the nail to elevate further away from the nail bed, a typical feature of a chronic fungal infection.
4. **Onycholysis:** The nails have an opaque quality that suggests separation of the nail from the underlying nail bed, which can be a sign of fungal invasion.

The patient's age is also a relevant factor since nail growth tends to slow with age, and elderly patients are more commonly affected by onychomycosis due to diminished blood circulation, a longer exposure to pathogenic fungi, and more time for nail plates to thicken.

The absence of other clinical information, such as symptoms of pain or itching, and the lack of surrounding skin changes, limits the assessment to visual inspection of the nails, which strongly supports the diagnosis of onychomycosis. However, confirmation would typically require mycological examination, such as potassium hydroxide (KOH) preparation, culture, or histopathology.



Done

**AI Symptom analysis and Image understanding \***

Weak      1      2      3      4      5      Great

**AI Diagnostic Reasoning \***

Weak      1      2      3      4      5      Great

Question Dermnet

**question:**This sixty-five-year-old man with no past history of skin disease has developed a

papulosquamous rash over his trunk and chest in the last 6 weeks. He has been feeling out of sorts, and he has developed some axillary and groin lymphadenopathy. As well as the rash on his trunk, he has these lesions on the soles of both feet..

**Diagnoses and explanation:**A papulosquamous eruption with lesions on the palms and soles should always raise suspicion of secondary syphilis. This should initiate questioning regarding sexual contacts, and recent history of genital, oral, or perianal primary syphilis lesions (chancres).

## AI generated Response

Diagnosis: Secondary Syphilis

Clinical Features Supporting Diagnosis:

The patient presents with a papulosquamous rash on his trunk and chest, accompanied by generalized symptoms such as feeling unwell, as well as axillary and groin lymphadenopathy. These symptoms are consistent with the systemic manifestations of secondary syphilis. The image shows lesions on the soles, which is a characteristic sign of this stage of syphilis. These particular lesions are reddish-brown, round, and can be either flat-topped or slightly raised, which fits the description of the rash seen in secondary syphilis. The lack of past skin disease and the acute onset of systemic symptoms further support this diagnosis. Given the patient's age and the sudden development of these symptoms, it is unlikely that they are due to a long-standing skin condition.

In real-life scenarios, the diagnosis would be further supported by serologic testing for syphilis, including non-treponemal tests (such as RPR or VDRL) and treponemal tests (such as FTA-ABS or TP-PA).



Done

### AI Symptom analysis and Image understanding \*

	1	2	3	4	5	
Weak	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	Great

### AI Diagnostic Reasoning \*

	1	2	3	4	5	
Weak	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	Great

### Question Dermnet

**question:**This 8-year-old boy has returned from a hiking holiday with his parents in rural England. He has developed a slowly spreading red ring over his chest. He does not recall any bites. He is otherwise well.

**Diagnoses and explanation:**The subtle but slowly spreading red ring is characteristic of erythema migrans, the early cutaneous manifestation of Lyme disease.



## AI generated Response

Diagnosis: Lyme disease (erythema migrans)

Clinical Features Supporting Diagnosis:

- The red ring, or rash, that is slowly spreading over the chest is characteristic of erythema migrans, which is the initial skin lesion associated with Lyme disease.
- The fact that the boy has been on a hiking holiday in a rural area is a relevant historical element since Lyme disease is typically transmitted by tick bites, which are more common in outdoor, wooded, or grassy areas where ticks may be present.
- The patient not recalling any bites is not unusual, as tick bites are often painless and thus go unnoticed.
- The absence of other symptoms (the boy being otherwise well) fits the pattern of early Lyme disease, where the rash can occur with little to no systemic symptoms.

In this case, the presence of the distinct rash after potential exposure to ticks in a rural setting strongly suggests Lyme disease, even in the absence of a known tick bite.



Done

### AI Symptom analysis and Image understanding \*

	1	2	3	4	5	
Weak	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	Great

### AI Diagnostic Reasoning \*

	1	2	3	4	5	
Weak	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	Great

### Question Dermnet

**question:**This 20-year-old woman has sore red spots around both eyes; her only other problem is allergic rhinitis for which she uses a steroid nasal spray.

**Diagnoses and explanation:**This is periocular dermatitis; it often coexists with perioral dermatitis. It produces small red papules and occasionally pustules firstly at the lower lateral lid, then may spread around the entire periocular skin. It is often sore rather than itchy. It is quite distinct from other causes of periocular eczema, such as atopic, seborrhoeic, or contact eczema.

## AI generated Response

Diagnosis: Periorbital Dermatitis

Clinical Features Supporting Diagnosis:

1. The distribution of red spots around the eyes is characteristic for periorbital dermatitis, which is an inflammation of the skin around the eyes.
2. The "sore red spots" likely represent areas of dermatitis characterized by erythema (redness), which might be accompanied by itching, swelling, and potential scaling or flaking skin.
3. The history of allergic rhinitis and the use of a steroid nasal spray could contribute to the condition. The use of topical or inhaled steroids, while necessary for managing allergy symptoms, can sometimes trigger or exacerbate periorbital dermatitis.
4. The condition could be a form of contact dermatitis, possibly aggravated by an allergen (related to an environmental factor or the steroid nasal spray), or could be an atopic dermatitis due to the patient's history of allergic disease. However, given the localized nature around the eyes, periorbital dermatitis is the more likely diagnosis.

The image provides a focused look at the skin around the eye, showing slightly raised, erythematous areas, which supports the diagnosis described. However, without additional information or clinical examination, this conclusion is made with provided evidence and may not account for other potentially related medical conditions.



Done

### AI Symptom analysis and Image understanding \*

1                      2                      3                      4                      5

Weak                                                                                    Great

### AI Diagnostic Reasoning \*

1                      2                      3                      4                      5

Weak                                                                                    Great

### Question Dermnet

**question:** This 26-year-old woman is concerned about spots on her back. They are not particularly itchy or painful, but their presence limits the kind of clothing she can wear. She would like for them to clear up before her forthcoming wedding. She also has scaling on the nasolabial folds and scalp.

**Diagnoses and explanation:** The image shows monomorphic papules over the interscapular area. There are no comedones, and there is no variety in the size and shape of lesions as one sees in acne. These features all suggest *Malassezia* (pityrosporum) folliculitis. The condition results from the overgrowth of pityrosporum yeasts within the hair follicles.

Humidity, heat, seborrhoea, immunosuppression, and HIV contribute to the overgrowth of the yeasts. The back is the most frequently affected area; it can also occur on the chest. It is often associated with seborrhoeic dermatitis in other sites.

## AI generated Response

Diagnosis: Tinea Versicolor (Pityriasis Versicolor)

Clinical Features Supporting Diagnosis:

The image of the patient's back shows numerous small, well-demarcated, hypopigmented, and slightly erythematous macules with fine scaling. There is no significant induration or signs of inflammation like marked redness or swelling.

Tinea Versicolor is a superficial fungal infection caused by yeast from the *Malassezia* group, which interferes with normal pigmentation of the skin, resulting in either lighter (hypopigmented) or darker (hyperpigmented) patches or spots on the skin surface. It is characterized by hypo- or hyperpigmented lesions with a fine scale, most commonly affecting the trunk and occasionally spreading to the neck and arms.

Some points from the history that are descriptive of Tinea Versicolor include:

1. The absence of significant itchiness or pain, which is typical because Tinea Versicolor is often asymptomatic.
2. The presence of scaling on the nasolabial folds and scalp may also be suggestive of *Malassezia* species colonization, which is known to cause seborrheic dermatitis in these areas, a condition closely related to Tinea Versicolor.

Given the description and photo, Tinea Versicolor would be the leading diagnosis for this patient's presentation. It is important to note that diagnosis should be confirmed with clinical evaluation and may include skin scraping with KOH examination or Wood's lamp examination in the clinical setting. Treatment may involve topical or systemic antifungals, depending on the extent and severity of the lesions.



Done

**AI Symptom analysis and Image understanding \***

Weak      1      2      3      4      5      Great

**AI Diagnostic Reasoning \***

Weak      1      2      3      4      5      Great

Question **Dermnet**

**question:**A 67-year-old man gives a six-week history of a progressive, itchy, and blistering eruption

affecting his limbs. There has been no involvement of his mucous membranes. He has a 10-year history of Crohn disease.

**Diagnoses and explanation:** Linear IgA bullous dermatosis. There are blisters arranged in a ring – the so-called “string of pearls” sign, which is most often seen in this condition.

Perilesional immunofluorescence will show a linear band of IgA at the dermoepidermal junction, in contrast to the granular deposits of IgA seen in dermatitis herpetiformis. The blisters are sub-epidermal. As opposed to dermatitis herpetiformis, linear IgA disease is not associated with gluten enteropathy.

## AI generated Response

Diagnosis: Bullous Pemphigoid

### Clinical Features Supporting Diagnosis:

The image shows large, tense blisters on an erythematous or urticarial base, which is characteristic of bullous pemphigoid (BP). The lesions are also distributed on the limbs, which is a common site for BP. The description of the blistering eruption as itchy supports the diagnosis of an inflammatory dermatosis like BP. The absence of mucous membrane involvement is also consistent with BP, as mucosal involvement is less common in BP compared to other blistering disorders such as pemphigus vulgaris. Additionally, the patient's advanced age is a common demographic for bullous pemphigoid. While Crohn's disease is not directly associated with BP, the presence of a chronic inflammatory disease such as Crohn's may suggest a generally increased risk of autoimmune conditions, including BP. However, it should be noted that other blistering diseases could potentially present with similar clinical features, and direct immunofluorescence testing would be required to confirm the diagnosis of BP definitively.



Done



### AI Symptom analysis and Image understanding \*

	1	2	3	4	5	
Weak	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	Great

### AI Diagnostic Reasoning \*

	1	2	3	4	5	
Weak	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	Great

### Question Dermnet

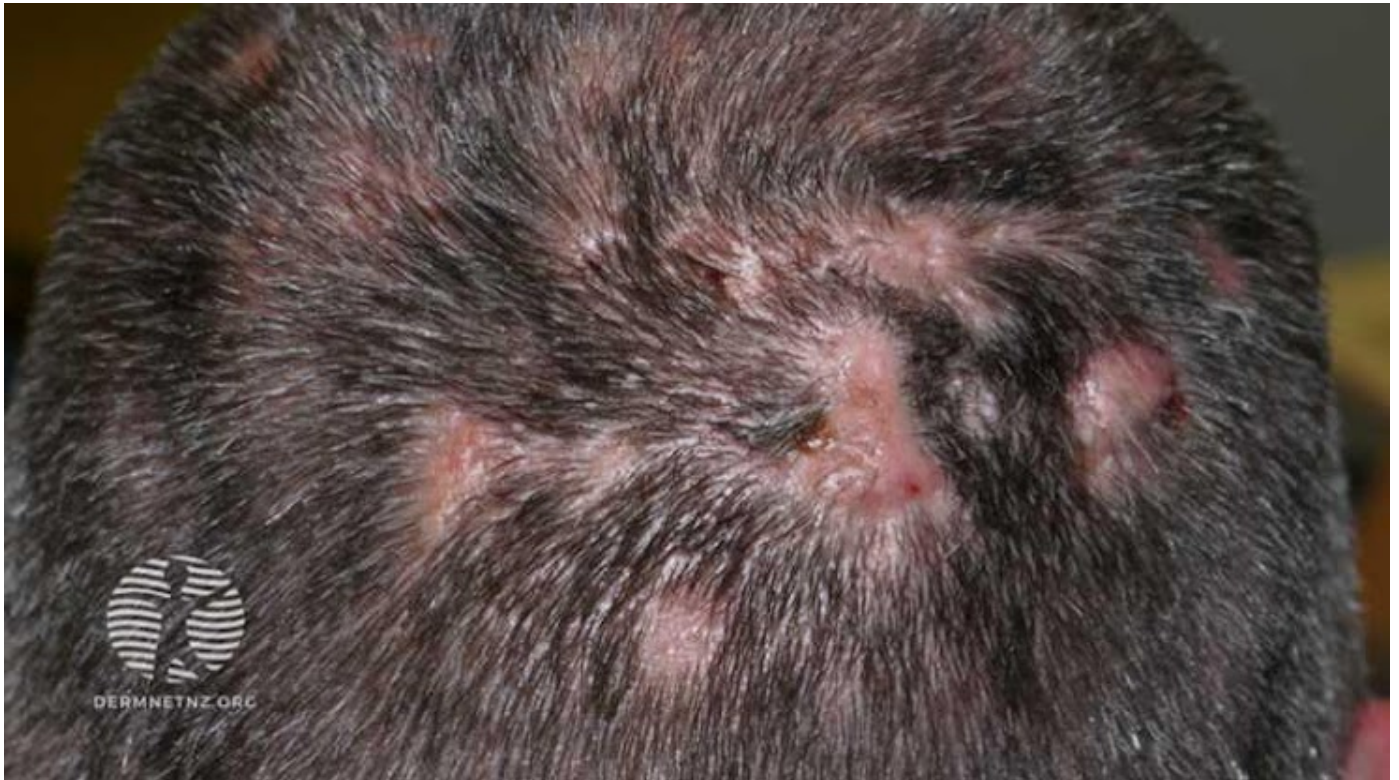
**question:**This 23-year-old man has a 3-year history of lesions on his scalp. These lesions can be painful and fluctuant swellings often discharge.

**Diagnoses and explanation:**This is dissecting cellulitis of the scalp, also known as perifolliculitis capitis abscedens et suffodiens and Hoffman disease. It produces nodules, cysts, and discharging scalp lesions with eventual patchy scarring hair loss (alopecia).

## AI generated Response

Diagnosis: Dissecting cellulitis of the scalp (also known as perifolliculitis capitis abscedens et suffodiens)

Clinical Features Supporting Diagnosis: The image shows multiple inflamed nodules with evidence of scarring and sinus tract formation on the scalp. These lesions appear to be painful and discharge, which is consistent with the history provided. Dissecting cellulitis of the scalp is an uncommon inflammatory scalp condition that presents with recurrent nodules, abscesses, and sinus tracts. It is often fluctuant and can result in significant scarring and secondary alopecia, as seen in the image. The chronic and recurrent nature of the condition with multiple lesions at different stages of evolution supports the diagnosis of dissecting cellulitis of the scalp over other potential causes of scalp lesions, such as bacterial infection (folliculitis or abscess), which typically would not present with this chronic and extensive scarring pattern.



Done

### AI Symptom analysis and Image understanding \*

	1	2	3	4	5	
Weak	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	Great

### AI Diagnostic Reasoning \*

	1	2	3	4	5	
Weak	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	Great

### Question Dermnet

**question:**This lady, in her mid-20s, has a slowly spreading plaque on her forehead. Her general health is good. Biopsy has excluded malignancy; it shows hyperkeratosis, follicular plugging, basal keratinocytes degeneration, and a dense perivascular chronic inflammatory infiltrate..

**Diagnoses and explanation:**There is a well-circumscribed plaque on a sun exposed area. Centrally, there is some atrophy. There is some scaling and follicular plugging. The lesion is red.

Coupled with the pathology, the features suggest discoid lupus erythematosus (DLE).

## AI generated Response

Diagnosis: Discoid Lupus Erythematosus (DLE)

Clinical Features Supporting Diagnosis: The patient presents with a slowly spreading plaque on her forehead, which is consistent with the chronic nature of DLE. The biopsy results showing hyperkeratosis, follicular plugging, basal keratinocytes degeneration, and a dense perivascular chronic inflammatory infiltrate are characteristic histopathological findings for DLE. The discoid (coin-shaped) plaques often exhibit hyperkeratotic scaling and may result in scarring, dyspigmentation, and alopecia if involving the scalp. The absence of a malignancy on biopsy and the patient's good general health also align with this diagnosis.



Done

## AI Symptom analysis and Image understanding \*

1                      2                      3                      4                      5

Weak                                                                                                                                    Great

## AI Diagnostic Reasoning \*

	1	2	3	4	5	
Weak	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	Great

### Question Dermnet

**question:**This 18-year-old girl has noted a scaly and slightly tender lesion on her chin; she has had a similar lesion on her scalp which has resulted in a patch of hair loss.

**Diagnoses and explanation:**The photograph shows a well circumscribed scaly patch of erythema as well as early atrophy. Coupled with history of the patch of alopecia, discoid lupus erythematosus is the most likely diagnosis.

## AI generated Response

Diagnosis: Tinea Faciei (Ringworm of the Face)

Clinical Features Supporting Diagnosis:

The image shows a well-demarcated, round lesion with a scaly, erythematous (red) border and central clearing on the chin. The lesion's edge appears slightly raised, which is characteristic for a dermatophyte infection. The description of a similar lesion on the scalp resulting in hair loss is also indicative of a dermatophyte infection, as these fungi often lead to scaling and hair loss when they infect hair-bearing areas (tinea capitis). Tinea infections are more commonly known as "ringworm" due to the classic ring-like appearance, although no actual worm is involved. The slight tenderness described by the patient can be associated with the active border of the lesion where the fungal elements are invading the skin.



Done

### AI Symptom analysis and Image understanding \*

	1	2	3	4	5	
Weak	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	Great

### AI Diagnostic Reasoning \*

	1	2	3	4	5	
Weak	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	Great

### Question Dermnet

**question:**This 46-year-old man has itchy lesions symmetrically on his elbows and knees, sacrum, scalp, and beard area. The lesions started six months ago and topical steroids have been of little help in reducing the itch. There is a family history of atopic eczema, although he has never had any atopic symptoms.

Routine blood tests (ie, full blood count, renal and liver function) are all normal.

**Diagnoses and explanation:**This man has dermatitis herpetiformis. This is an immunobullous disorder associated with gluten sensitivity. The vesicles and blisters that arise in this condition are small (2 to 4 mm) and because the condition is so itchy, they are often excoriated so that intact blisters are seen only infrequently.

The clue to the diagnosis is often from the rash distribution. It affects symmetrically the elbows and knees, sacrum, interscapular area, scalp, and beard area. Itch is usually severe. It is slightly more common in atopic individuals.

## AI generated Response

Diagnosis: Psoriasis

Clinical Features Supporting the Diagnosis:

- The presentation of itchy lesions that are symmetrically located on the elbows and knees, sacrum, scalp, and beard area is characteristic of psoriasis, particularly plaque psoriasis. Psoriasis often affects these extensor surfaces, and the symmetric distribution is a common feature.
- The appearance of the lesions in the image shows well-demarcated, erythematous plaques with silvery-white scales, which is typical of psoriasis plaques.
- The patient's history of lesions that are resistant to topical steroid treatment is also compatible with psoriasis, as this condition can sometimes be refractory to such medications.
- The family history of atopic eczema is not directly indicative of psoriasis but does suggest a genetic predisposition to skin conditions, which might increase the likelihood of psoriasis.
- The chronicity of the lesions, starting six months ago and persisting, is consistent with the often chronic and relapsing course of psoriasis.

While the patient does not have a personal history of atopic dermatitis (eczema), the clinical features in the images and the history provided are more typical of psoriasis than eczema or other dermatologic conditions. Additionally, normal routine blood tests would not rule out psoriasis, as it is a primarily clinical diagnosis.





Done

### AI Symptom analysis and Image understanding \*

	1	2	3	4	5	
Weak	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	Great

### AI Diagnostic Reasoning \*

	1	2	3	4	5	
Weak	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	Great

### Question Dermnet

**question:**This boy has a 3 month history of a white lesion on his cheek. There is no history of trauma.

**Diagnoses and explanation:**This is a cutaneous calculus, or subepidermal calcified nodule, a lesion caused by the accumulation of calcium in the upper dermis. They have a cream white colour, are usually solitary, often appear filiform, and most commonly occur in children on the head and neck, especially the ear.

## AI generated Response

Diagnosis: Molluscum Contagiosum

Clinical Features Supporting Diagnosis:

The image displays a single, well-defined raised lesion with a characteristic white, waxy, umbilicated or dimpled center. The lesion appears to be smooth and pearly, which are classic descriptors for molluscum contagiosum. This viral infection, caused by a poxvirus, typically presents in children and is spread through direct contact. The lack of trauma history and the chronic duration of the lesion further support this diagnosis. Molluscum contagiosum lesions can persist for a few months to several years before resolving spontaneously, which aligns with the 3-month history provided in the case. The surrounding erythema may indicate irritation or minor secondary infection, which can occur with these lesions, especially in children.



Done

### AI Symptom analysis and Image understanding \*

	1	2	3	4	5	
Weak	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	Great

### AI Diagnostic Reasoning \*

	1	2	3	4	5	
Weak	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	Great

### Question Dermnet

**question:**This 75-year-old woman has developed a painful haemorrhagic lesion in the last 2 days on her lateral calf. She has coronary artery disease and atrial fibrillation.

She has been on a beta-blocker as well as warfarin for several months. Her INR control has been very erratic..

**Diagnoses and explanation:**This is coumarin necrosis. It most frequently occurs shortly after the introduction of a coumarin anticoagulant (eg, warfarin)

## AI generated Response

Diagnosis: Warfarin-induced skin necrosis

Clinical Features Supporting Diagnosis:

The image shows a large, well-demarcated, painful lesion with a hemorrhagic (bruised) appearance on the patient's lateral calf. The central area of the lesion is dark and necrotic, surrounded by erythema indicative of inflammation. The rapid onset of 2 days and the patient's history of erratic INR control while on warfarin suggest that this is warfarin-induced skin necrosis. This condition occurs due to the initial hypercoagulable state induced by warfarin, which can happen when there's a rapid reduction in vitamin K-dependent clotting factors, with protein C being affected first due to its short half-life. Given her medical history of coronary artery disease and atrial fibrillation, it is not uncommon for such patients to be prescribed warfarin, and in cases of inconsistent INR control, there is an increased risk for this adverse drug reaction.



Done

### AI Symptom analysis and Image understanding \*

	1	2	3	4	5	
Weak	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	Great

### AI Diagnostic Reasoning \*

	1	2	3	4	5	
Weak	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	Great

### Question Dermnet

**question:**This man developed an inflamed tender lesion over the left lower chest extending down towards the abdomen. As the pain and inflammation resolved, he developed a cord-like lesion palpable under the skin.

**Diagnoses and explanation:**This man has developed acute superficial thrombophlebitis of the thoracoepigastric vein. As the condition has resolved, he has developed a fibrotic cord-like band. This was first described by Henri Mondor, a French surgeon, and the condition is often termed Mondor disease.

## AI generated Response

Diagnosis: Mondor's disease (Superficial thrombophlebitis of the chest wall)

Clinical Features Supporting the Diagnosis:

- The image shows a linear, cord-like structure on the chest that is consistent with a superficial vein affected by thrombophlebitis.
- The patient's history of an inflamed, tender lesion that resolved to leave a palpable cord-like lesion under the skin is indicative of Mondor's disease. This disease is characterized by thrombophlebitis of the superficial veins of the breast and chest wall.
- Although inflammation has resolved, the remaining palpable cord is suggestive of the thrombosed superficial vein that is typical in Mondor's disease.
- Environmental factors such as trauma or excessive physical activity might contribute to the condition, but the clinical presentation is strongly indicative of Mondor's disease.



Done

### AI Symptom analysis and Image understanding \*

	1	2	3	4	5	
Weak	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	Great

### AI Diagnostic Reasoning \*

	1	2	3	4	5	
Weak	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	Great

#### Question Dermnet

**question:**This 18-year-old school student and star rugby player has developed painful weeping lesions in the last 4 days in his right axilla.

**Diagnoses and explanation:**The unilateral development of superficial, blistering lesions that are rupturing to produce honey-coloured crusted lesions is highly suggestive of bullous impetigo.

The condition is infectious and spreads by both fomites and direct skin-to-skin contact. The causative *Staphylococcus aureus* bacterium produces a toxin that causes splitting of the epidermis just below the granular layer of the epidermis. This produces superficial epidermal blistering that rupture easily, so blisters are only occasionally seen.

## AI generated Response

Diagnosis: Herpes Zoster (Shingles)

### Clinical Features Supporting the Diagnosis:

The lesions in the image are grouped vesicles on an erythematous base, which is typical for herpes zoster. They appear to follow a dermatomal distribution, which is characteristic of this condition. Additionally, herpes zoster is known to cause painful lesions which is consistent with the patient's complaint of painful weeping lesions. The occurrence in the axilla could indicate the involvement of a thoracic dermatome, which aligns with the typical presentation of shingles.

The rapid development of symptoms within the last 4 days is also compatible with the natural progression of herpes zoster. This condition is caused by the reactivation of the varicella-zoster virus, the same virus that causes chickenpox. While it can occur in any age group, it is more common in individuals with weakened immune systems, older adults, or under stress, though sports players may experience it due to physical stress or trauma.



Done