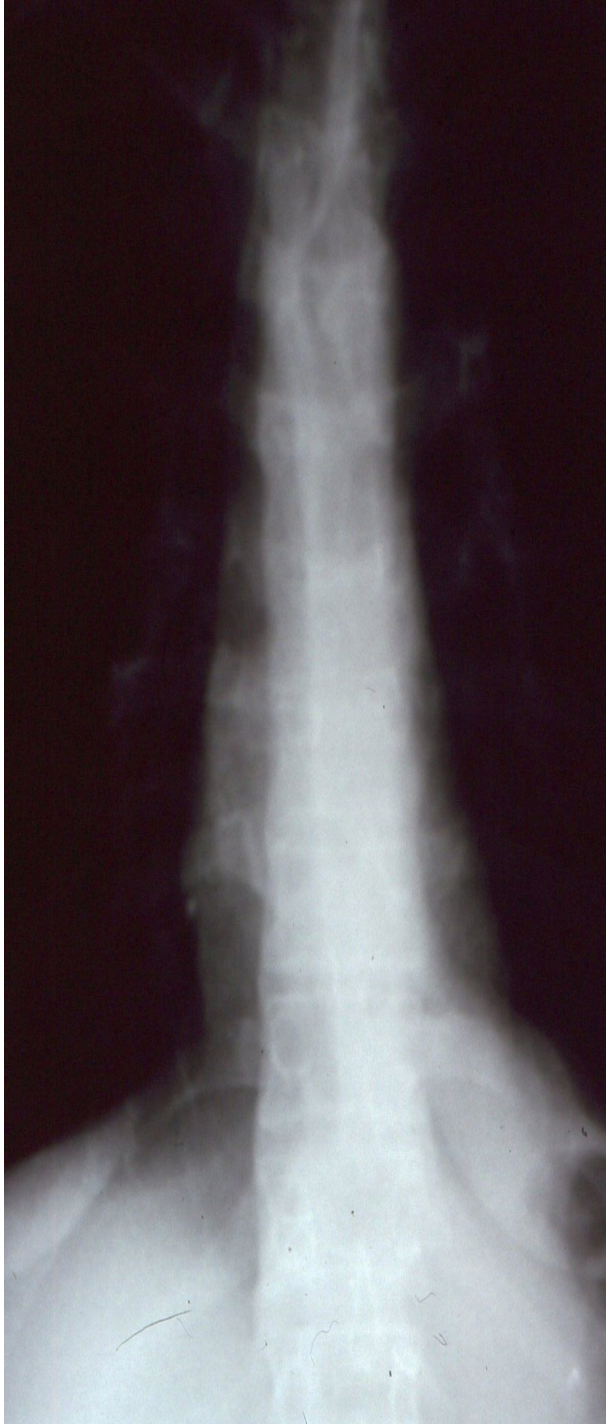
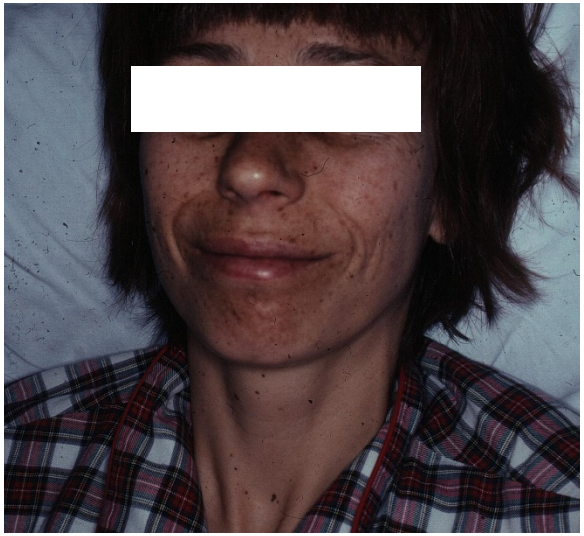
This lady was admitted with intermittent vomiting for several weeks and for some reason a chest X ray had been taken in Casualty, She was dehydrated.

The Consultant was told the story and was shown the X-ray and noted the small heart. He suggested a diagnosis. What was it?

Clue. Heart muscle atrophy, like skeletal muscle atrophy, occurs with chronic underusage

The next picture show a picture of her on admission (on the left) and a picture of her a year previously (on the right).



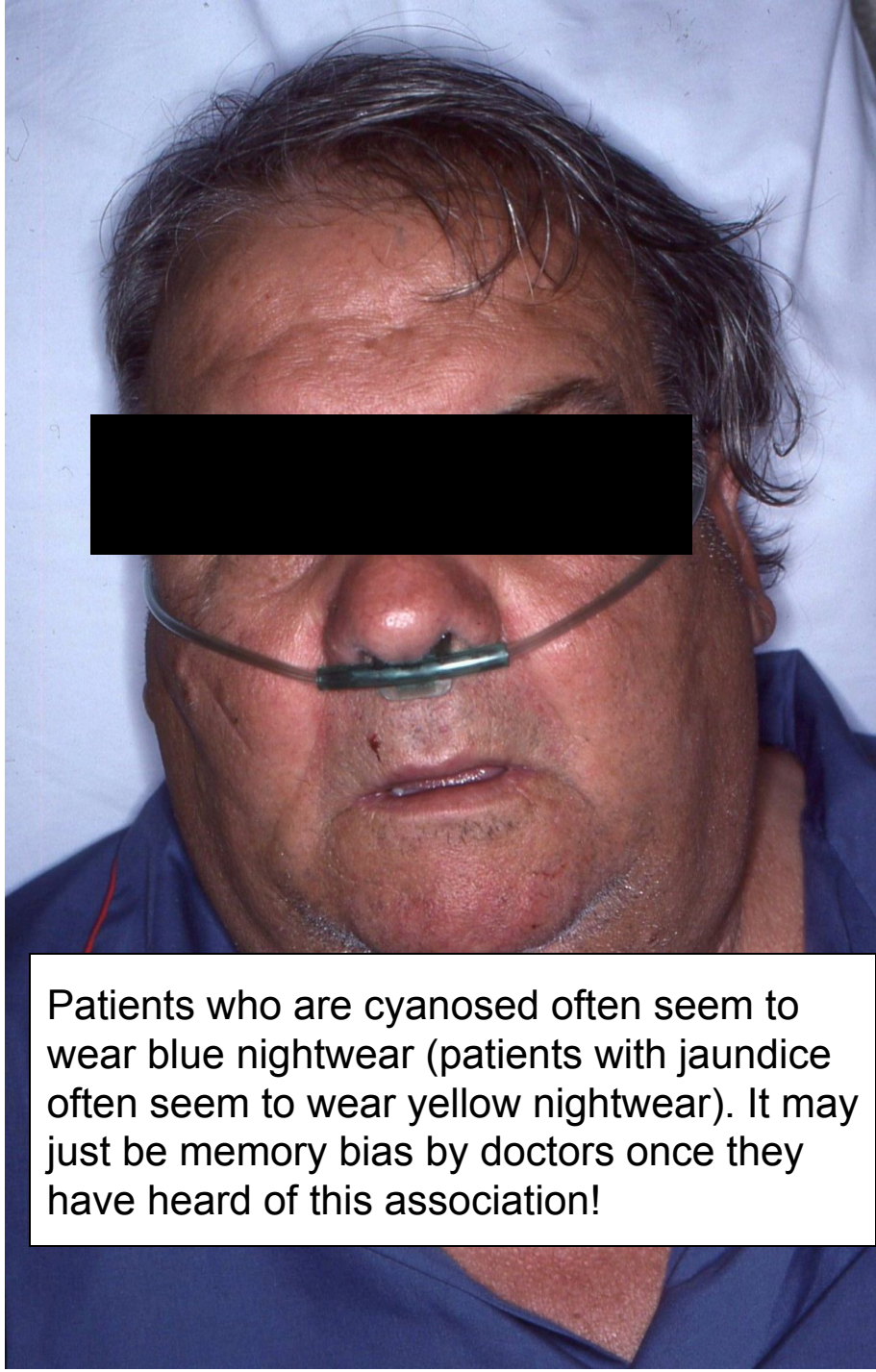


Generalised pigmentation! Surely you can make the diagnosis now!

Addison’s disease. In the past adrenal tuberculosis would have been the most common cause but today autoimmune adrenal damage is usually the cause. And why should tuberculosis localise in the adrenals? Presumably because they are soaked in steroids (they produce steroids after all) and thus the impaired inflammatory response allows tuberculosis to flourish. For similar reasons, in end stage AIDS patients are often hypoadrenal, often caused by Cytomegalovirus adrenalitis.

This man show classical signs of what an old-fashioned chest physician would call a blue bloater.

What are the basics of management if he were having an exacerbation of his long-standing chronic obstructive airways disease?



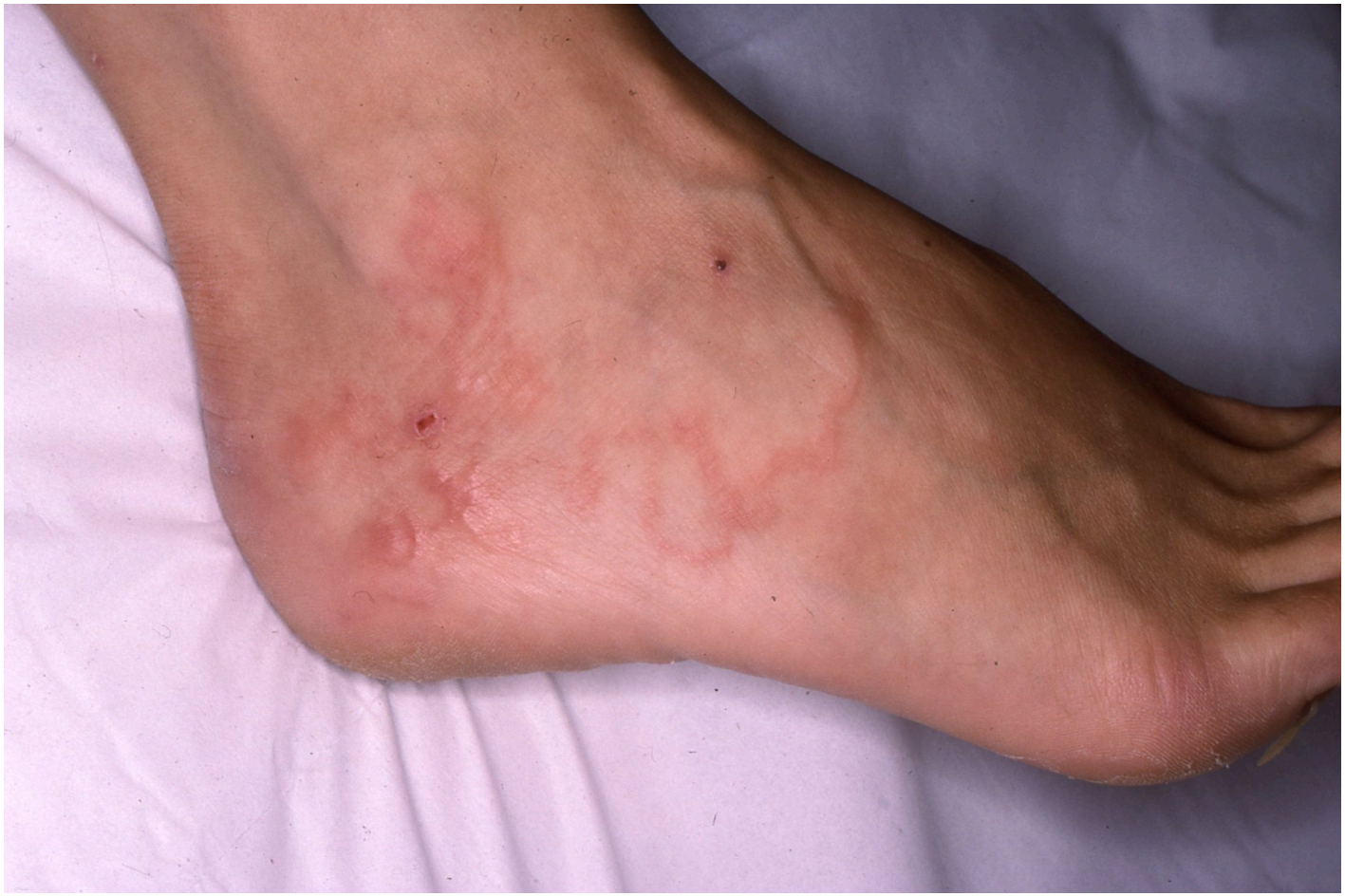
Patients who are cyanosed often seem to wear blue nightwear (patients with jaundice often seem to wear yellow nightwear). It may just be memory bias by doctors once they have heard of this association!

Give no drugs that would suppress his respiratory drive “First do no harm.”

Give oxygen, starting at 26 percent and increasing only if ascertained that his pCo_2 was not increasing.

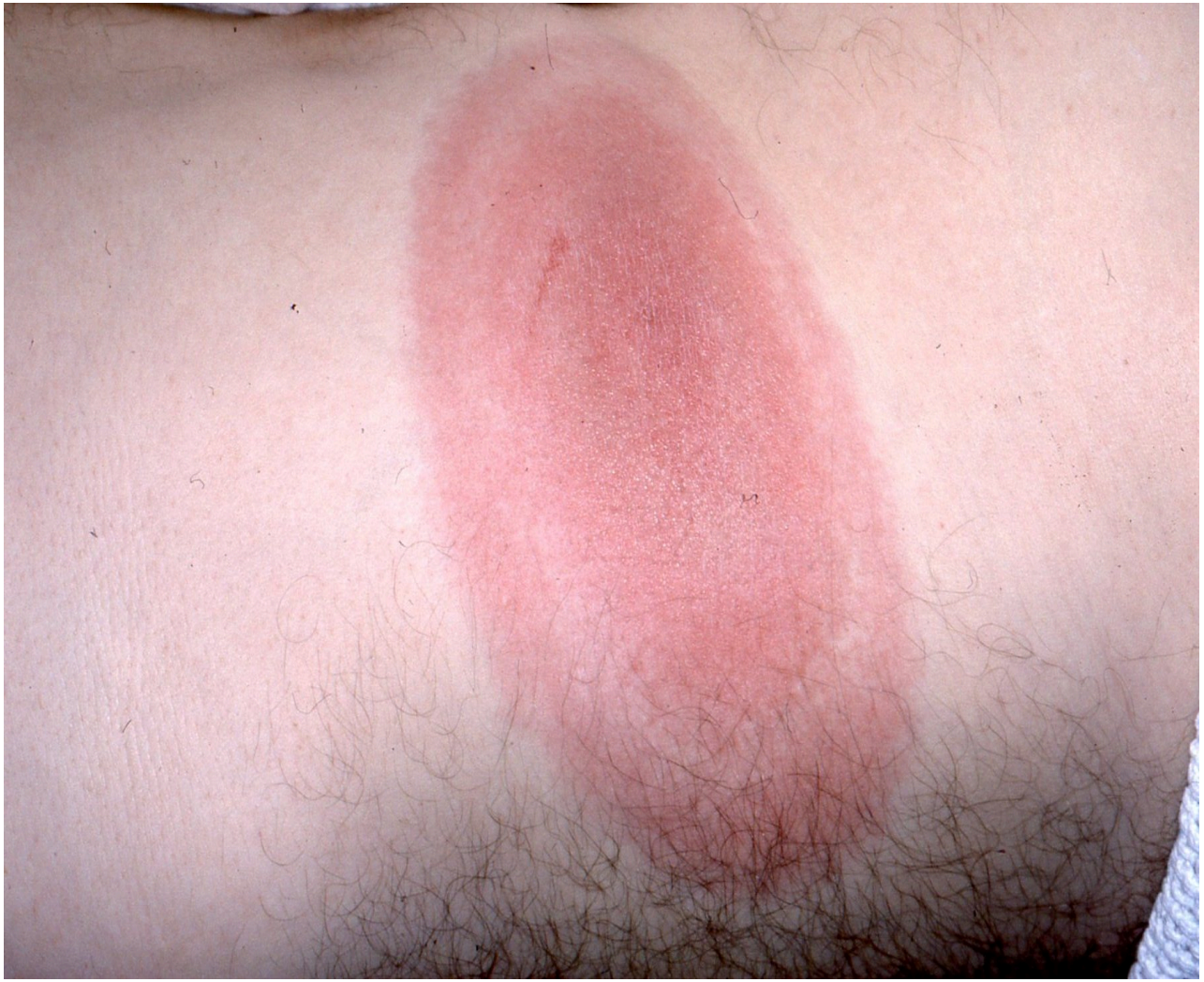
Consider the need for antibiotics – is there evidence of bacterial infection such as an increase in the volume or discolouration of his sputum.

Look for signs of heart failure



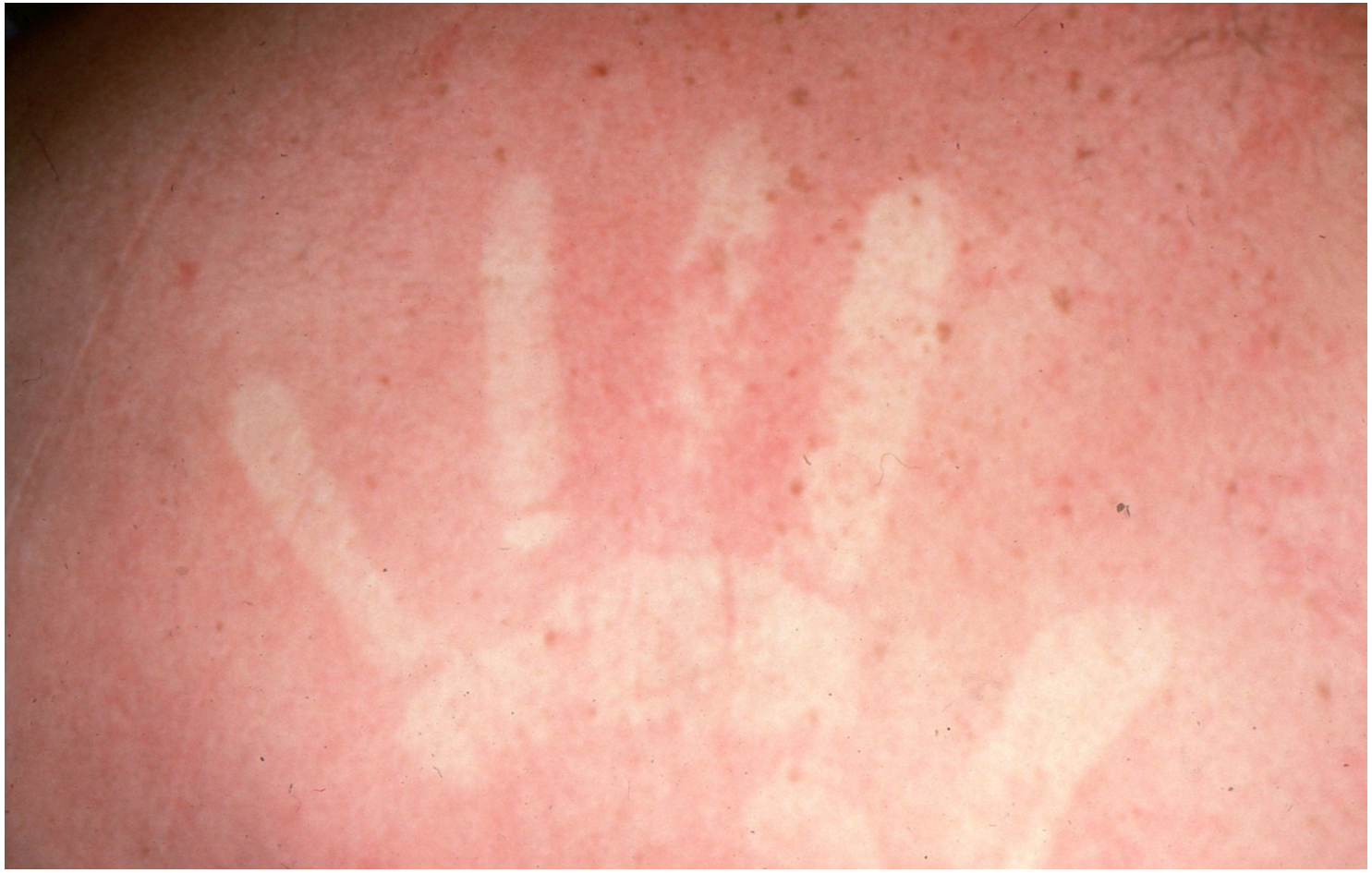
This man had just returned from a beach holiday in Greece and had developed an intensely irritating rash on his foot. What is this?

This is cutaneous larva migrans. This will be caused by the larva of dog hookworm. He will have stood on a dog stool and the larvae will have penetrated his skin and will be desperately moving around his skin because they cannot complete their life cycle in the human (have some sympathy!). Treatment is with antihelminthic drugs but do not forget that these do not relieve symptoms - he will require an antihistamine in addition.



This circular rash on the abdomen developed over a few days. Plainly it is not "a viral rash." But what is it? What town's name is attached to it?. And what might he recall within the previous few weeks?

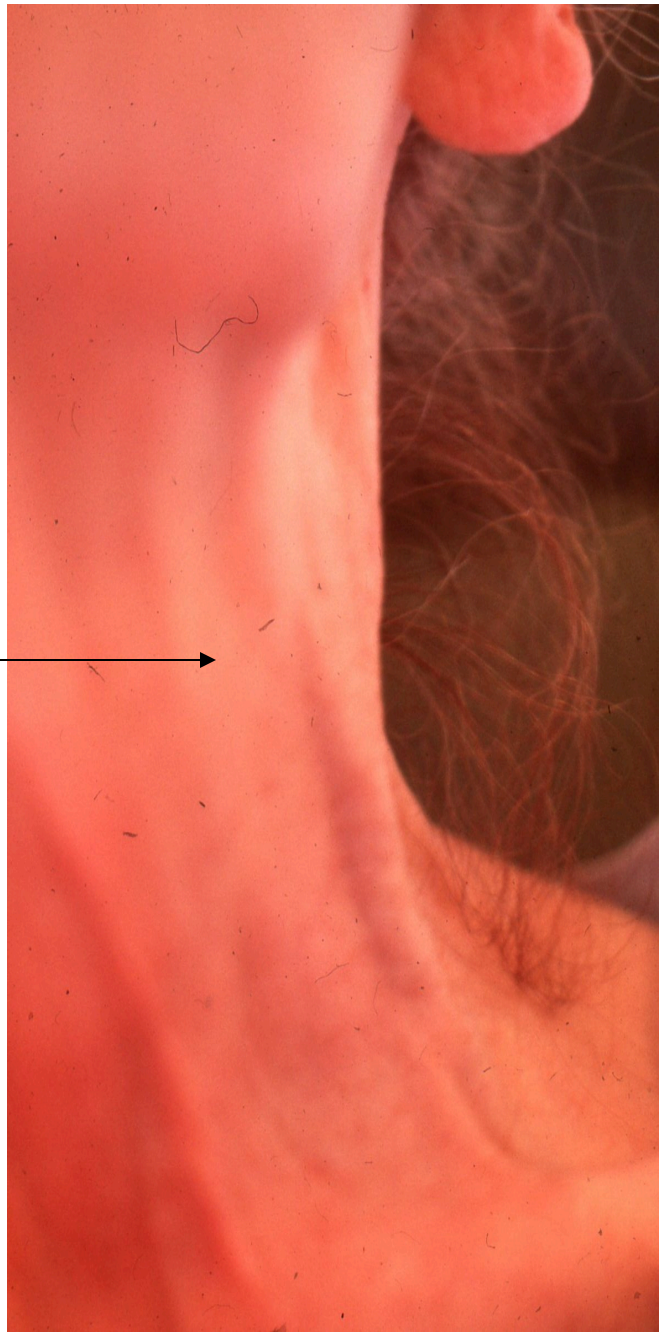
This is erythema chronicum migrans and is diagnostic of the tick borne Lyme disease, an illness first recognised in Old Lyme, a town in Connecticut in USA. He had noted a tick on his body. The British form of Lyme disease is caused by a slightly less virulent organism and there are less long-term complications (heart, neurological and haematological).



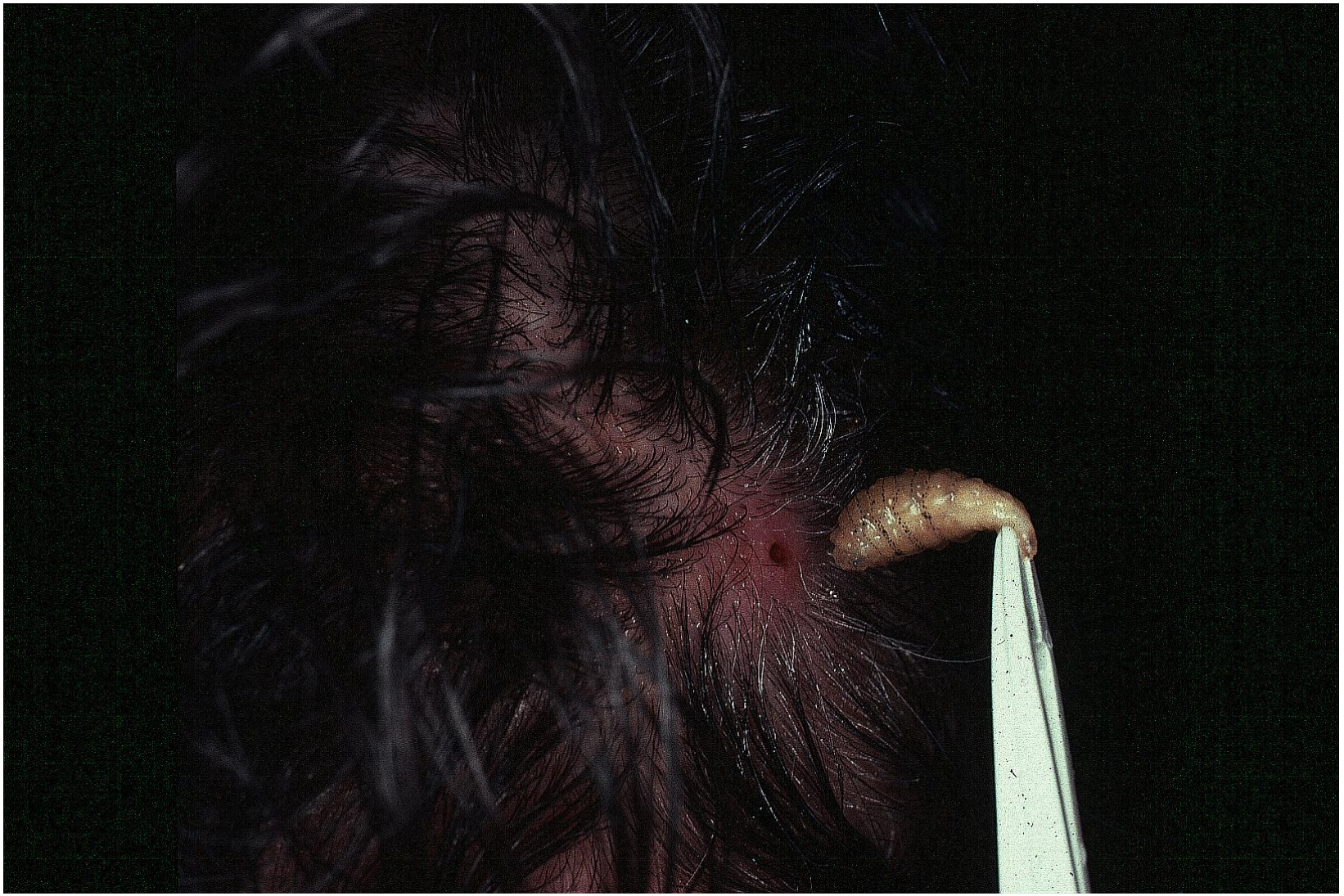
This 20 year old lady had become acutely unwell and had this blanching rash. She was profoundly hypotensive. What could be the cause and what might need to be removed?

This would most likely be Staphylococcal toxic shock syndrome, which may be associated with infection of a tampon (which should be removed and sent for culture). Occasionally It may be caused by a Staphylococcal infection elsewhere

What is this?



This is a grossly raised venous pressure (but be careful that it is not caused by kinking of veins caused by cervical fascia, in which case the raised pressure will disappear if the head is rotated). The heart sounds were faint and she had tamponade caused by a tense pericardial effusion associated with breast cancer. Her pulse reduced in in inspiration because heart function was even more impaired by the splinting effect of the expanded lungs in inspiration.

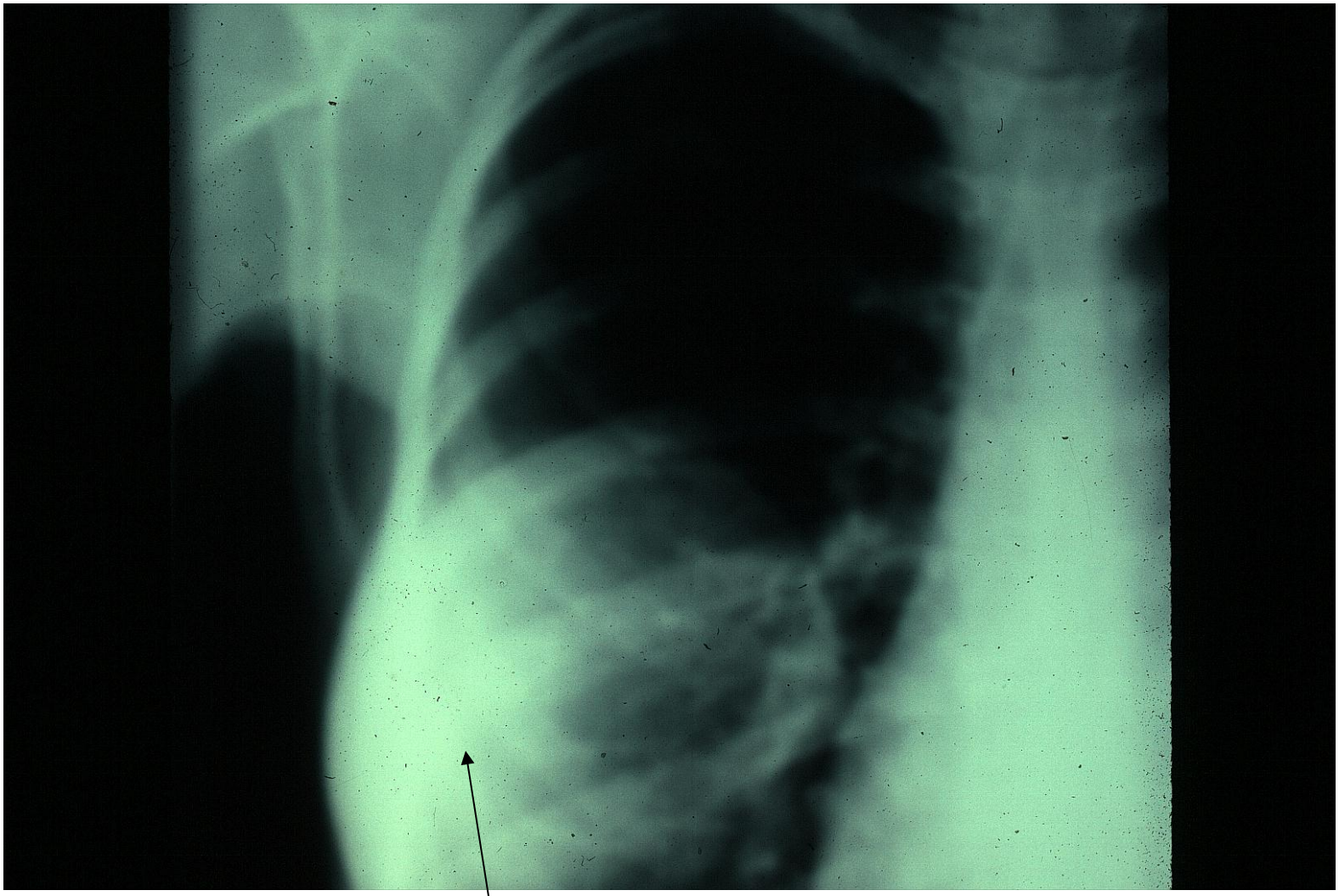


What is this, and where had the patient been?

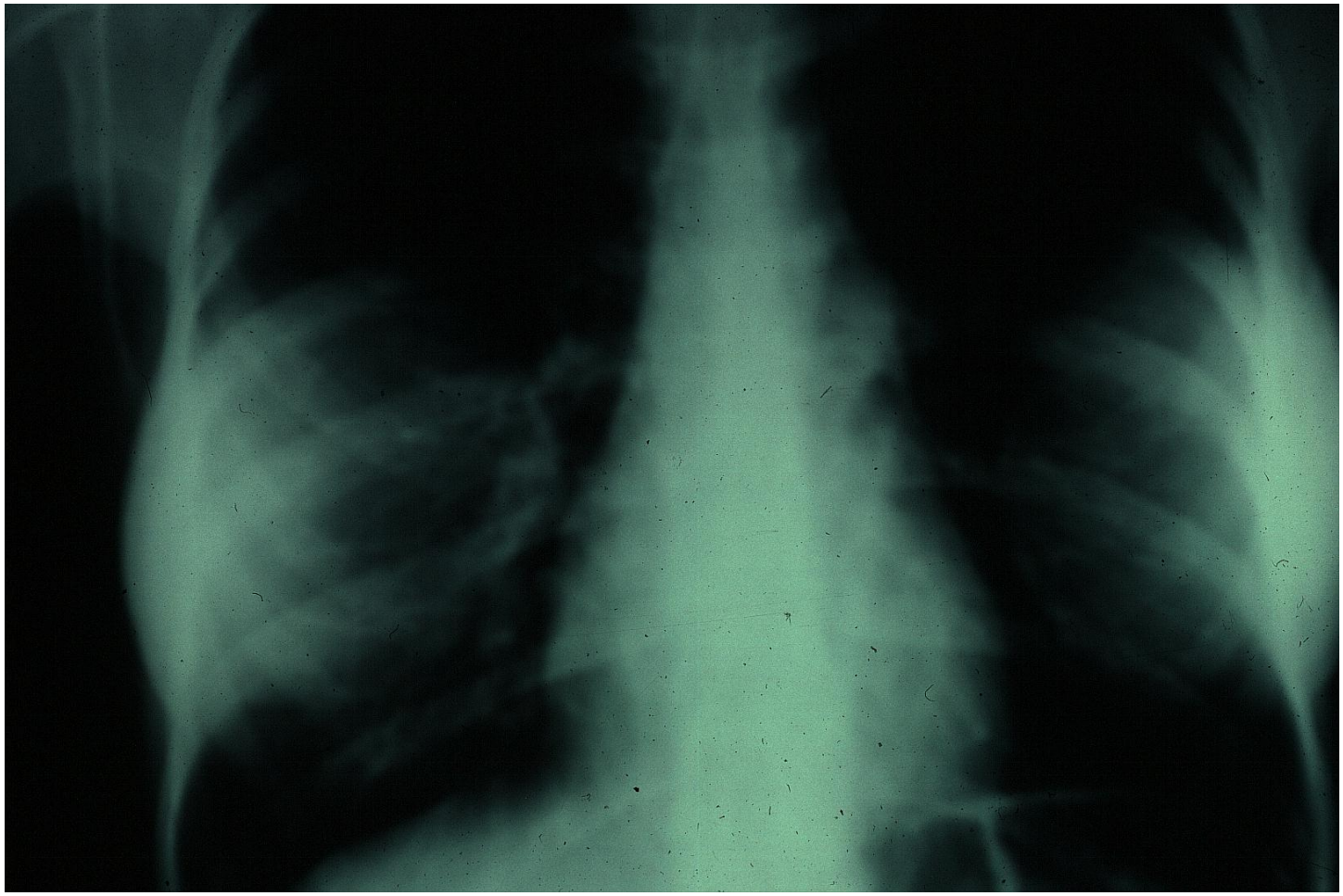
This is a tumbu fly maggot, a species of blowfly common in East and Central Africa.

The fly lays its eggs on the ground and the larvae crawl over soil until they come in contact with man (or other mammals), penetrate the skin, and then develop beneath the skin. On maturing the larvae exit the host (as illustrated), fall to the ground, bury themselves and then pupate.

Dogs appeared to be the main hosts, larvae are always always localized on those parts of the host which come in contact with the soil. It was not altogether clear how this had happened in this patient.

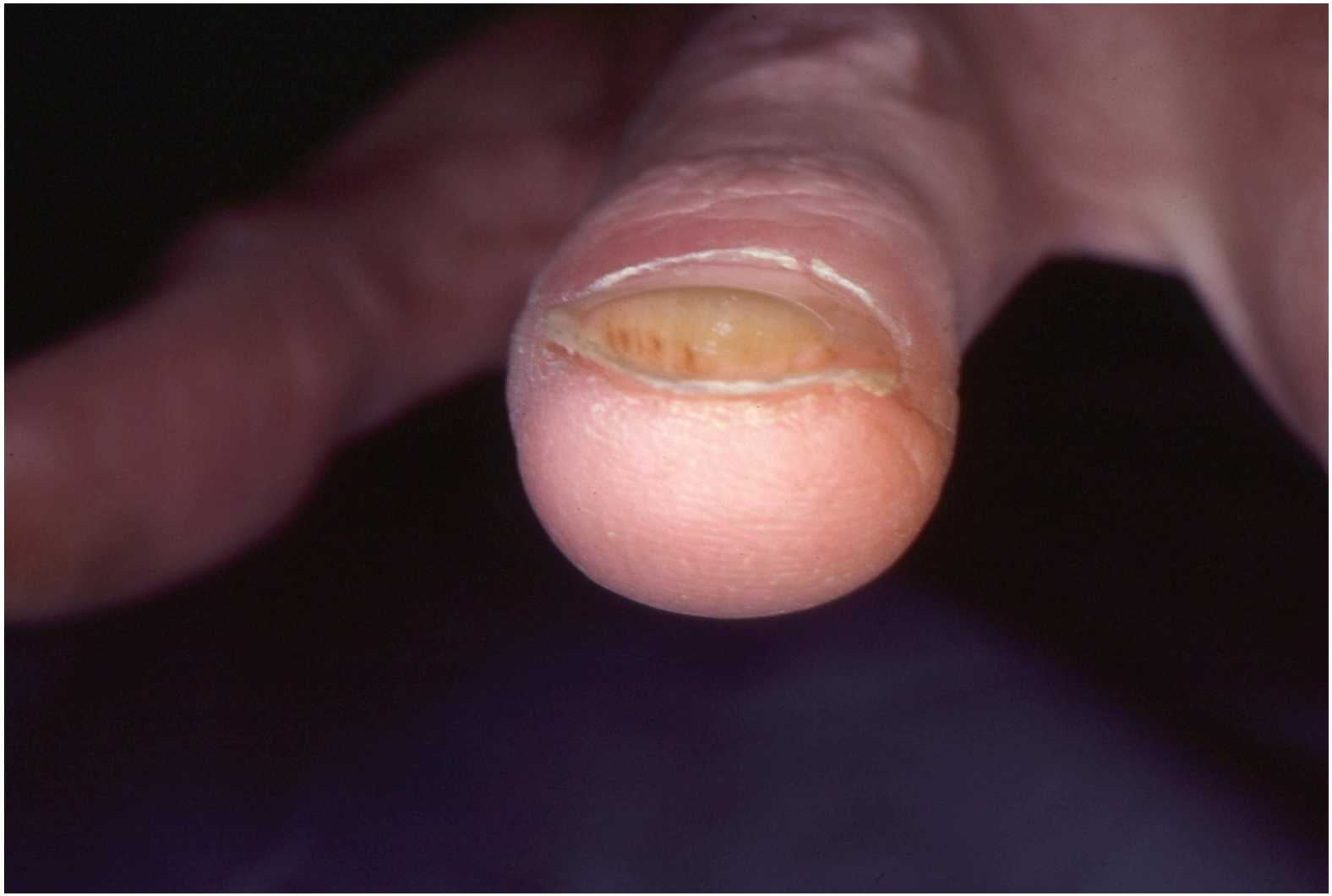


What is the differential diagnosis of this shadowing?



Perhaps the whole X-ray makes matters clearer! It is a bilateral abnormality and did you notice that the shadow on the previous picture extended outside the rib cage? This lady had silicon breast implants. In the early days of breast implants gas filled bags were used – why was this a bad idea?

A bad idea. The gas-filled bags were inserted at ground level. Flight in lower pressure jet cabins caused the implants to expand and were, apparently, very painful. Similar considerations apply to flying with sinusitis when the ostia may be blocked – there will be expansion of the air in the “sealed” (maxillary) sinus as the jet ascends and pain also on descent.



This elderly lady had been vaguely febrile for about three months. She was noted to have an abnormality of her nails which caused the doctor to put a drop of water thereupon. What is the name of the nail condition, what may it signify, and what was the cause of her febrile illness?

This is koilonychia and it may be found in chronic iron deficiency anaemia. The cause of her anaemia and febrile illness was (what was previously known as) subacute bacterial endocarditis. But why do we know this? Did you not notice that she had splinter haemorrhages revealed on this picture because of the refractive index of the water on her nail?

My third daughter (thank you Sam!) when aged 10 was asked to create this picture of me “teaching the medical students” (I am the gorilla on the right). What diseases can you get from foxes, polar bears, penguins (and why do these two never meet in the wild?), pigs, badgers, and reptiles? I will not ask you to differentiate between crocodiles, kaymens, and alligators!).

Foxes in certain (non-British Isles) countries may be a natural reservoir of rabies.

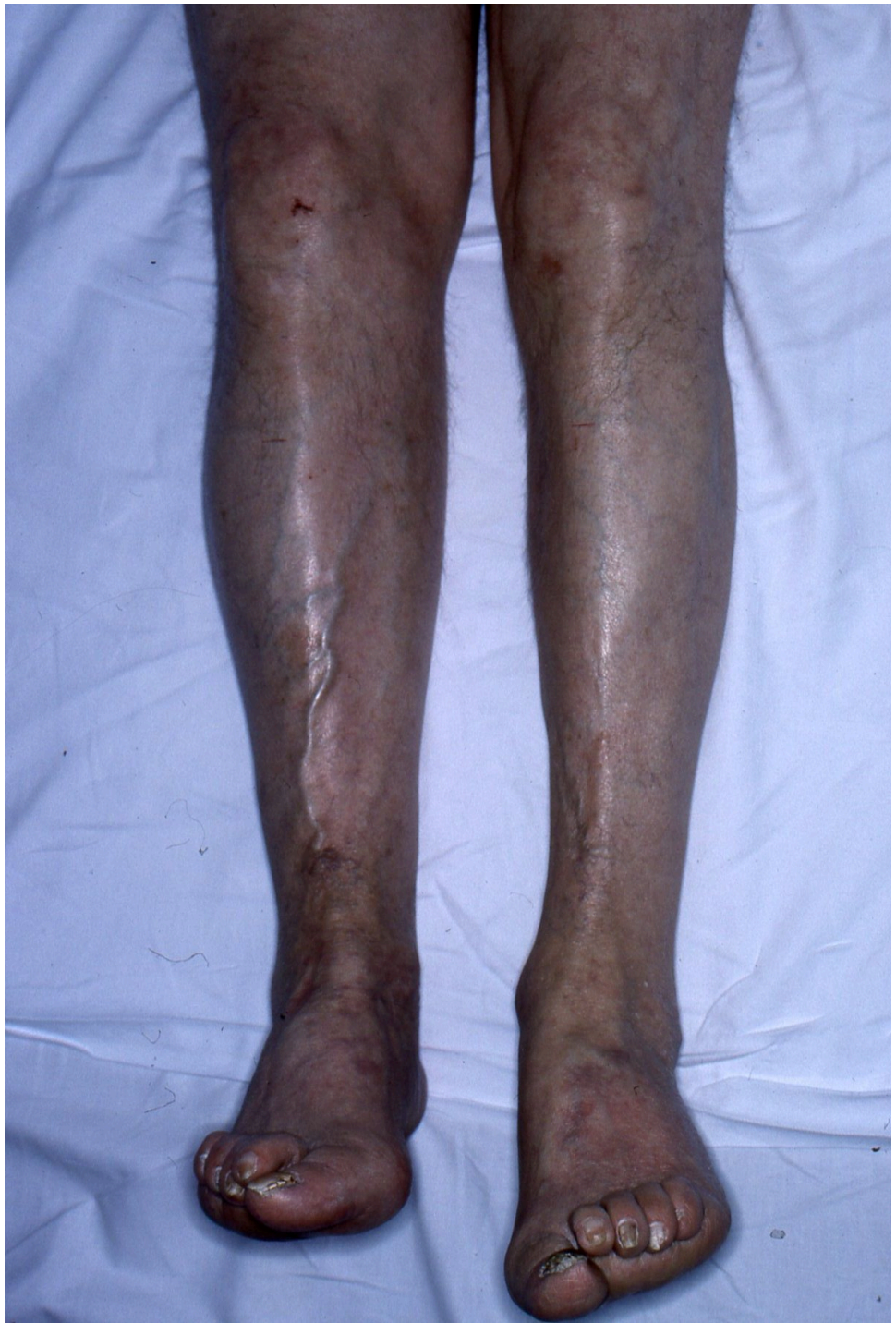
Polar bear meat, if inadequately cooked, can cause trichiniasis, an acutely painful disease affecting muscles (that was responsible for the collapse of one historical polar expedition). You can also get Vitamin A toxicity from eating polar bear liver (everyone remembers this for some reason!).

It is possible, one supposes, to get Salmonella from penguin eggs, but otherwise I have no suggestions to make. Polar bears live at the North Pole and penguins at the South Pole, so they never meet in the wild.

Pigs can give you tapeworms or cysticercosis.

Badgers are blamed for spreading TB to cattle (the cattle eat faecally contaminated grass) but not to humans (who do not usually eat grass). Reptiles often have Salmonella in their stools (there have been Salmonella outbreaks from terrapins kept as pets)

This man had a painful right calf? Why?



He has a deep venous thrombosis.

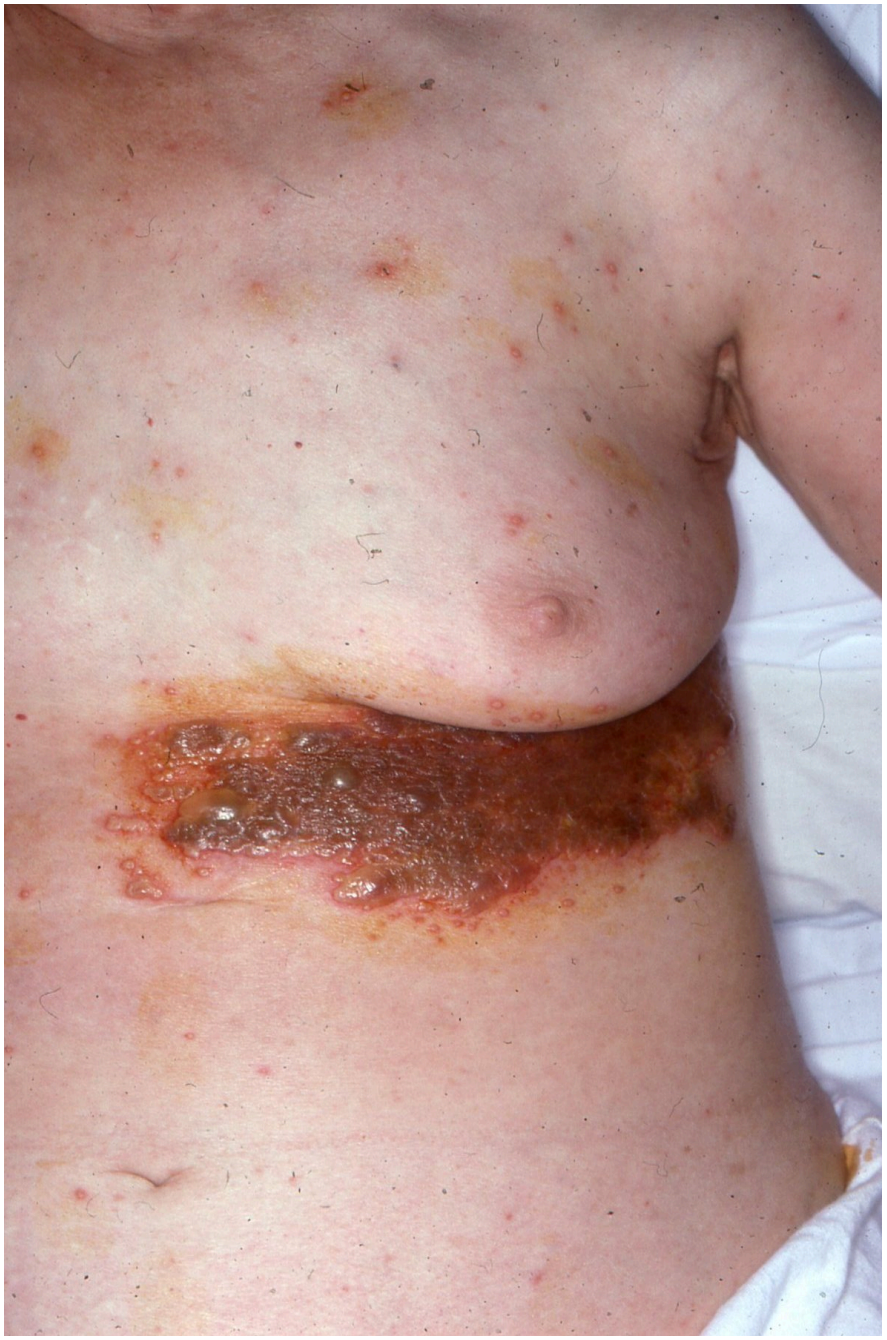
The commonest sign of a deep venous thrombosis is nothing at all (most are asymptomatic). Clinical manifestations Include swelling, pain, tenderness, increased “jellyness” at the back of the calf, increased heat and dilated superficial veins (the blood has to get back somehow).

Incidentally, if such a patient has sustained a pulmonary embolus, it may have originated from the clinically unaffected calf – the inflammatory response in the affected calf may serve to localise the thrombus, whereas in the unaffected calf there may be a clot waving in the venous stream, ready to break off.

This lady has what?

What is the natural history of this?

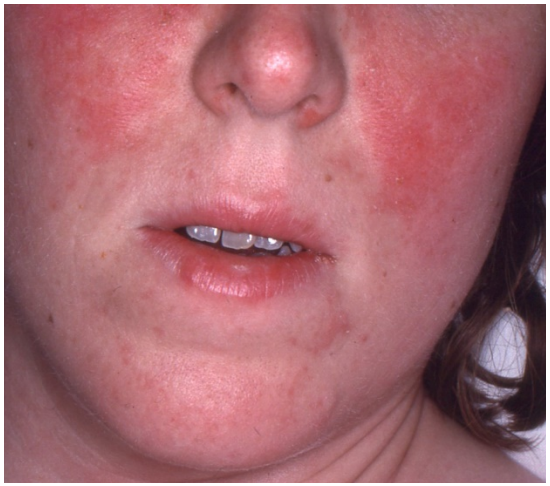
What is the significance of the spots outwith the dermatomes affected?

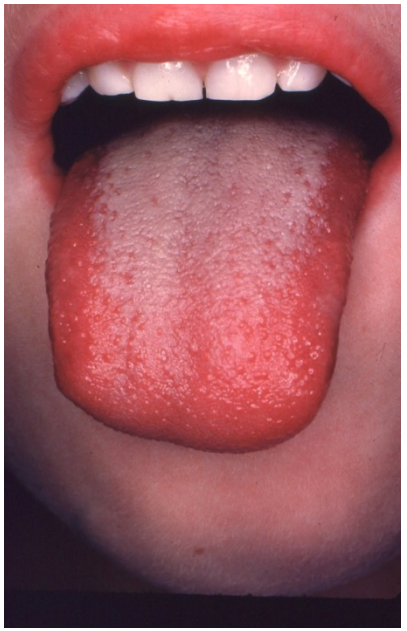


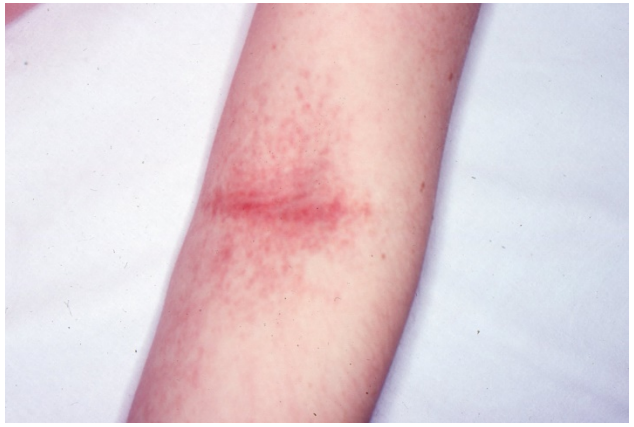
This is shingles (Varicella zoster)

People get an attack of chickenpox and, as in all Herpes virus infections, the virus is thereafter carried for life (in the case of Varicella zoster particularly in the ganglia of cranial and spinal nerves). At some later time (usually many years) the virus may reactive and spread down the nerves (initiating prodromal tingling or pain) and then arrive at the skin to form what amounts to a very dense simultaneous eruption of chickenpoxes.

Most patients with shingles have an occasional chickenpox outwith the dermatomes affected, and this can be a useful clue if the shingles eruption is trivial and not obviously following a dermatomal distribution.

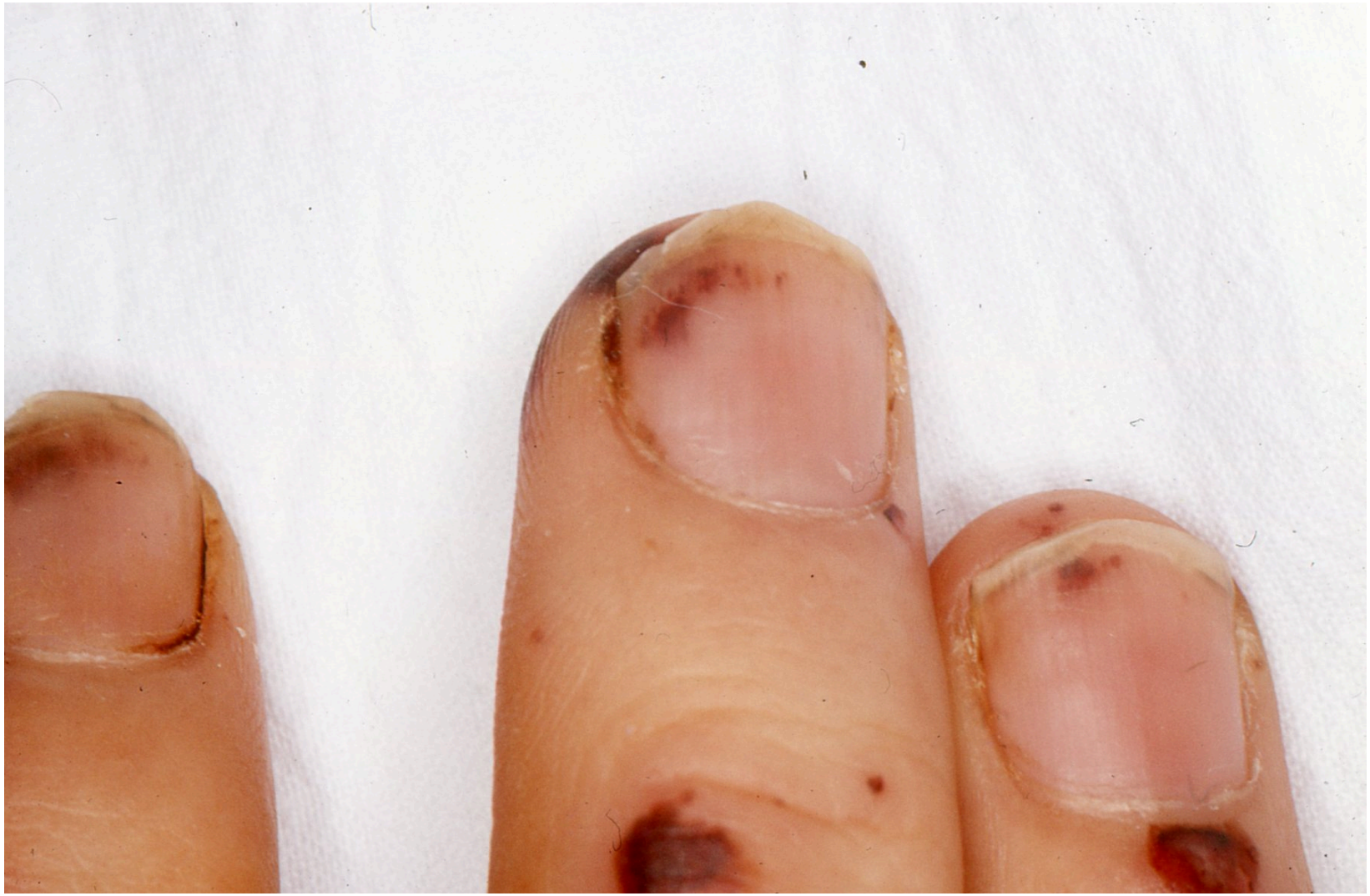






This lady had been abroad and had developed a sore throat, followed by a rash on her face, a furred tongue, and a curious staining at her elbow joint.
What is the diagnosis?

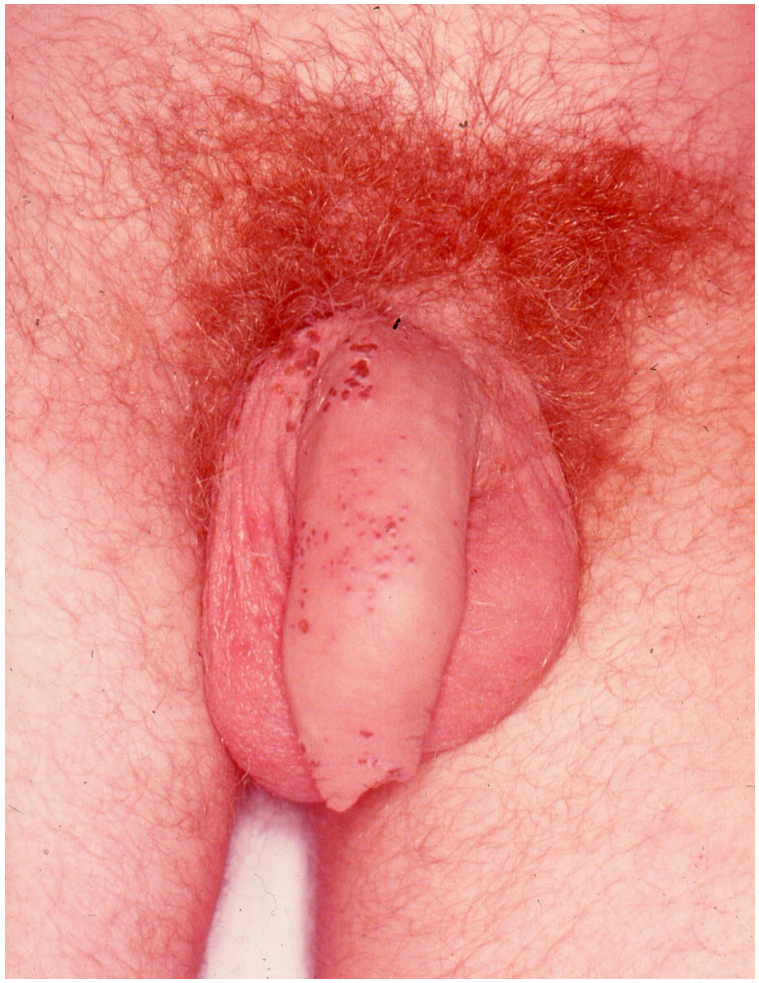
This is scarlet fever. It is very rare in the UK and, even then, most instances are a mild sore throat with “a bit of a red rash.” This lady had a severe attack. The staining at the elbow joint is Pastia’s sign and reflects leakage from blood vessels. In the past scarlet fever was greatly feared as it was a marker that the suffer had a severe Streptococcal infection with all the possible sequalae.



This young man, an intravenous drug abuser presented acutely unwell. Why? And what would be the quickest way to confirm the diagnosis?

These are gross splinter haemorrhages and he has nail fold infarcts in addition. The supposition is that he has Staphylococcal septicaemia with underlying (***left sided***) endocarditis. His chest X-ray also had fluffy shadowing suggesting **right heart** involvement. Classically intravenous drug abuse (usually involving intravenous injections) causes ***right sided*** endocarditis.

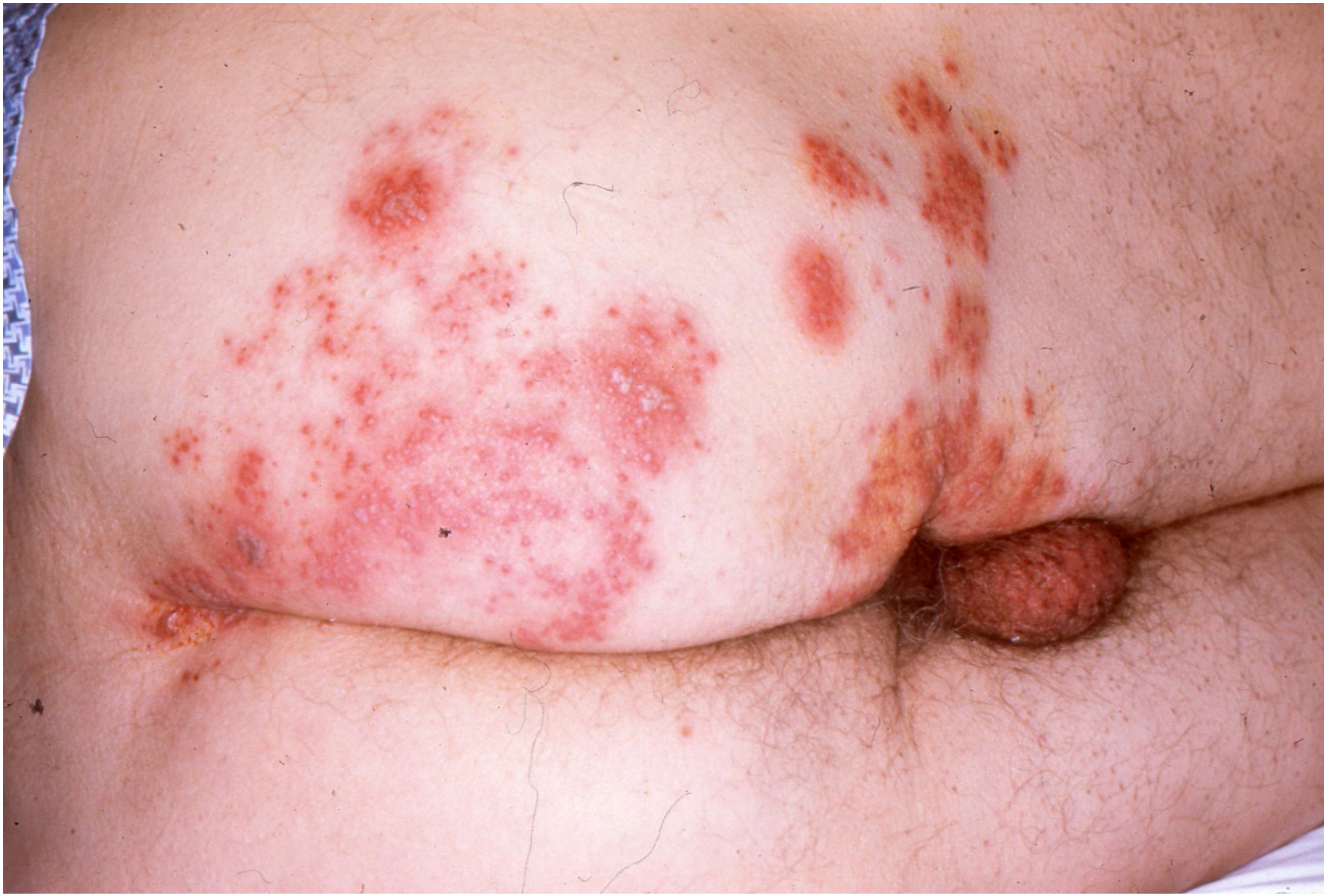
The quickest way to confirm the diagnosis would be to scrape one of the nail fold areas and send the blood for microscopy which would reveal Gram positive cocci (Staphylococci). Blood cultures would confirm septicaemia but (apart form the easily audible murmur of tricuspid incompetence and giant V waves of the jugular venous pressure) an echocardiogram would show heart valve abnormalities



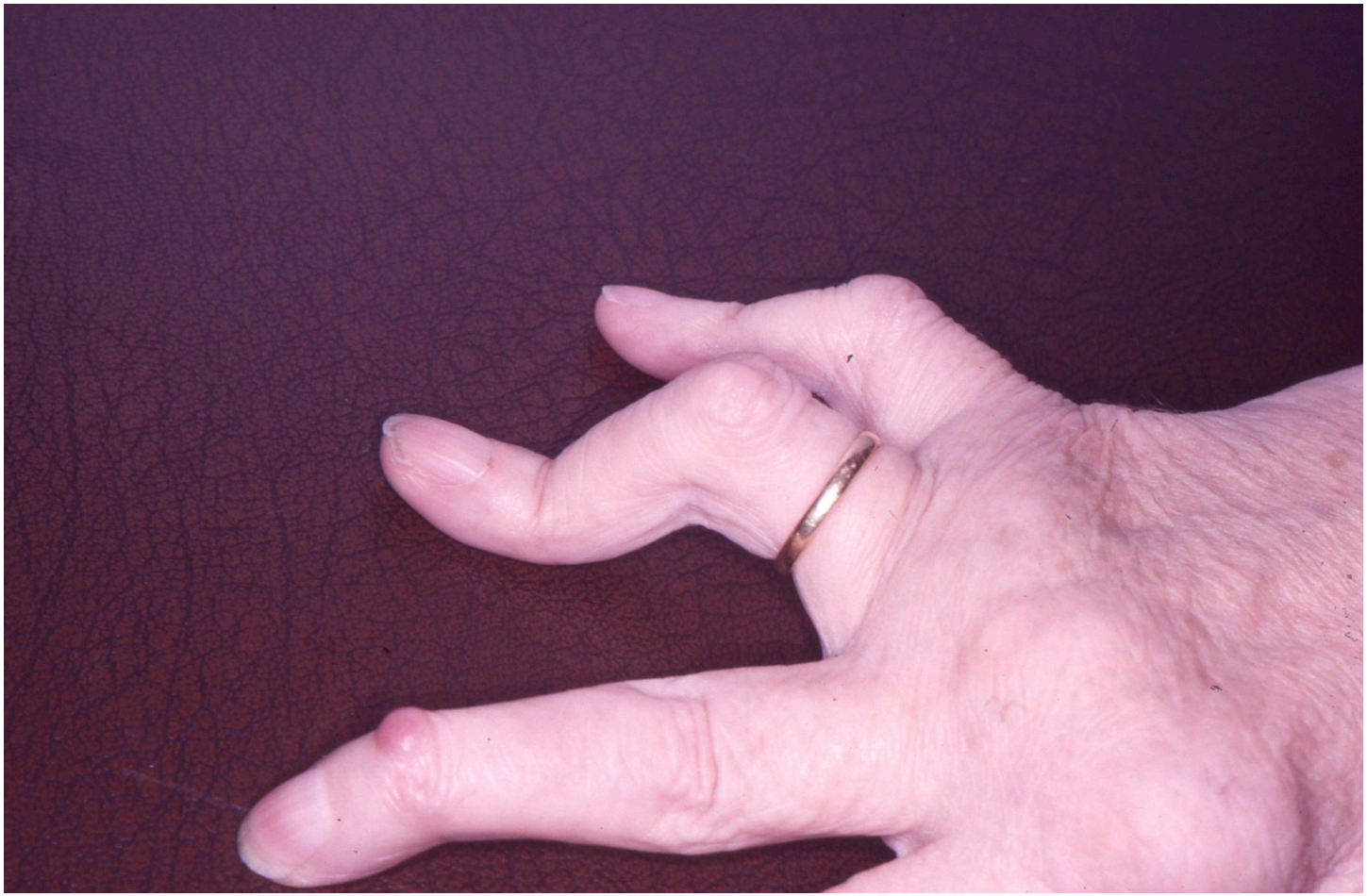
This man (how could you doubt this) presented to an STD Clinic on three successive days complaining of (obviously hysterical) right sided penile pain. On the fourth day he presented with a rash and the diagnosis was then obvious. What was the diagnosis?

Shingles. The lesions are right sided.

What is the nerve root innervation of the penis and where else might he have lesions?

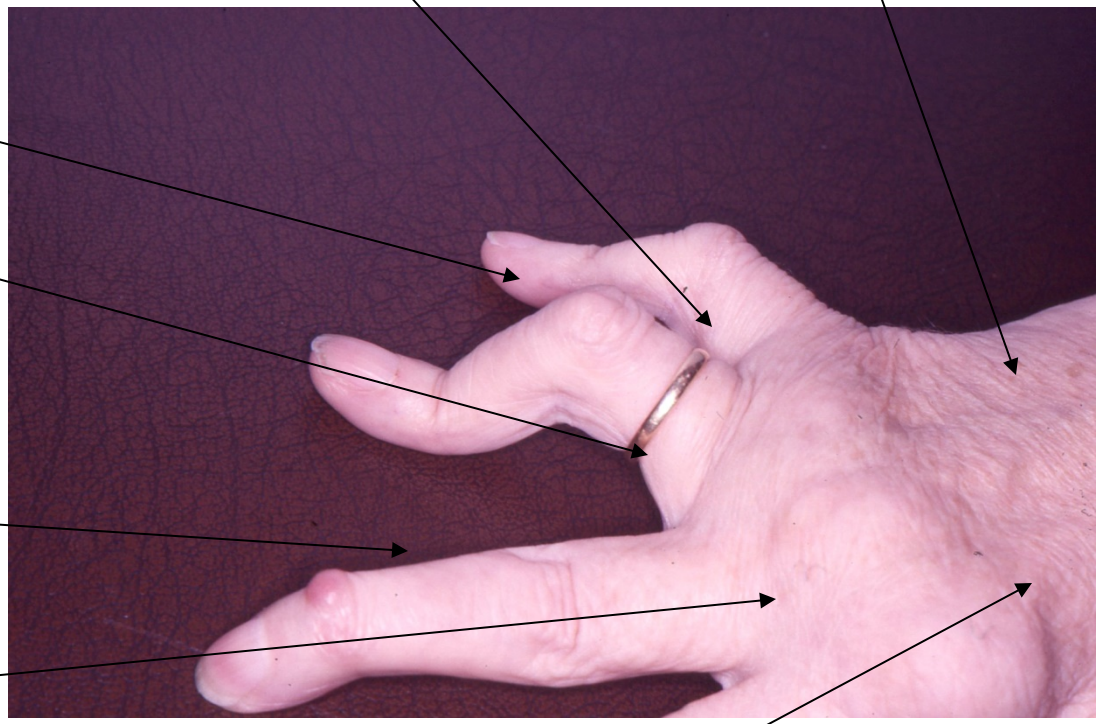


The penis is usually innervated by Sacral roots 2,3,4. The buttock lesions are probably In this distribution.



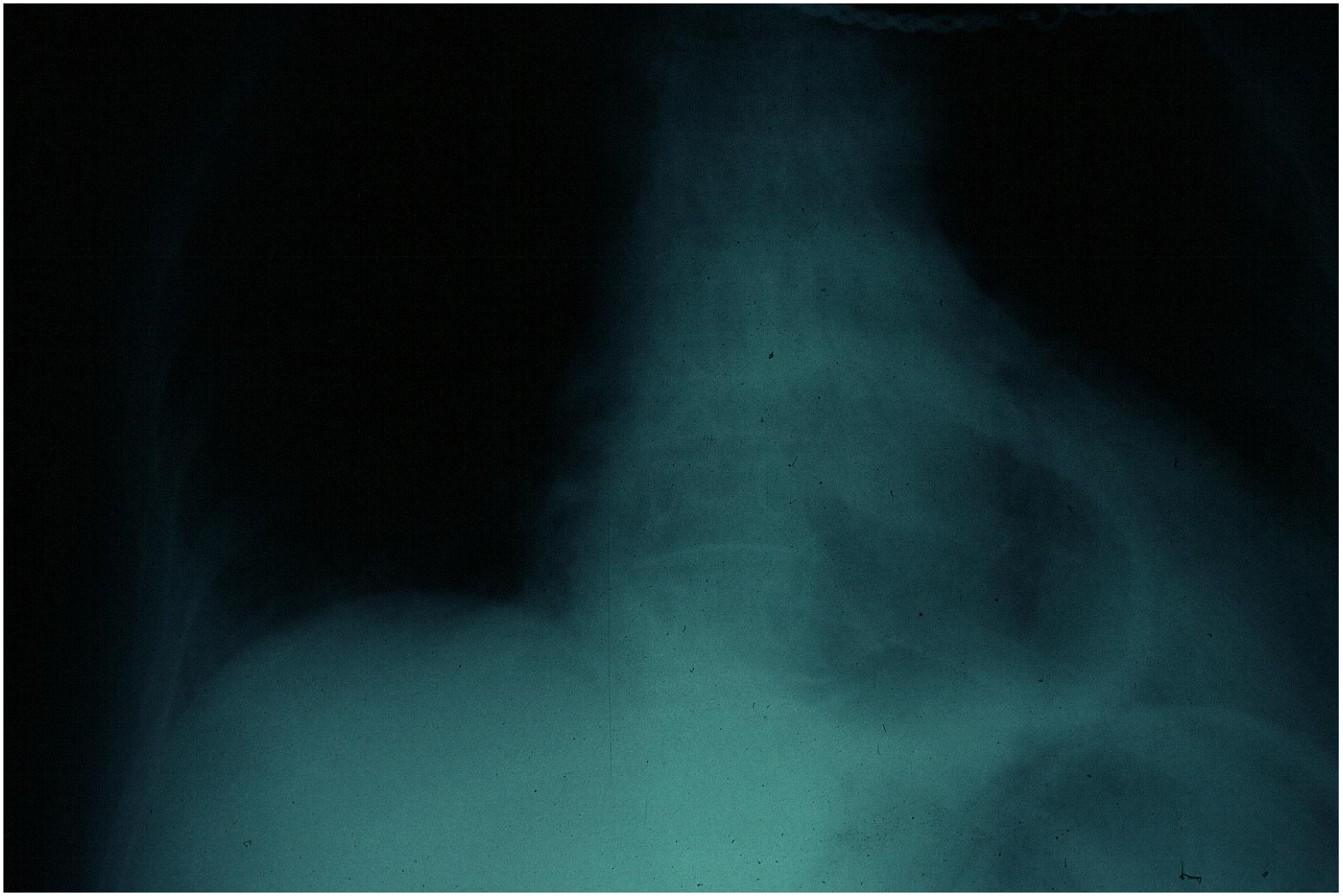
This is the classical appearance of?

Rheumatoid arthritis



“Z” and Boutonnière deformities can also occur

If the arthritis is active then there may be additional features of inflammation – with hot joints and extra pain. Be aware that septic arthritis may complicate rheumatoid arthritis.



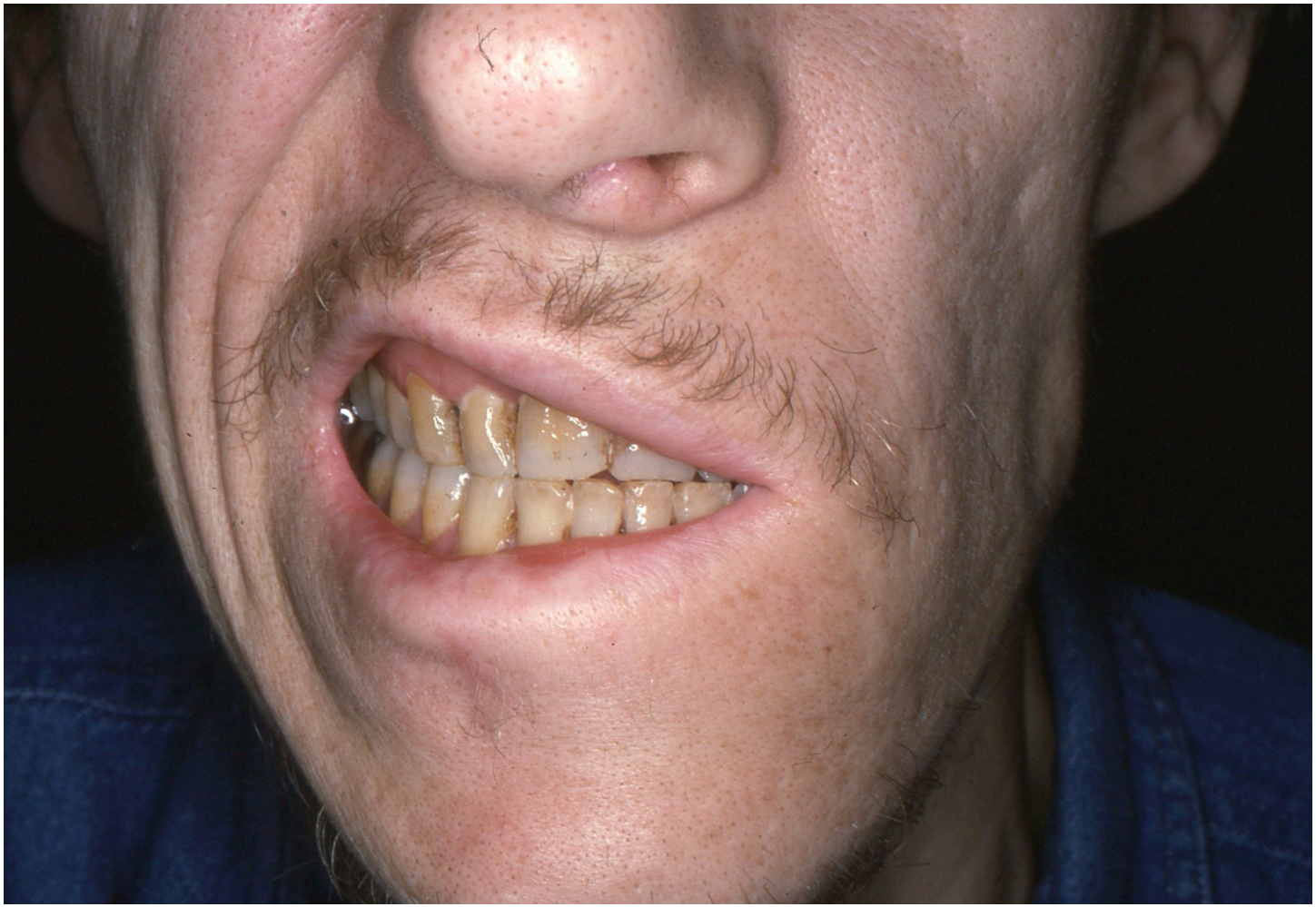
This person has air in the ventricles. What are the causes of this?

Do not believe anything you are told. Always make up your own mind!

Do you seriously think that someone with that much air in the ventricles would be alive and having a chest X-ray?

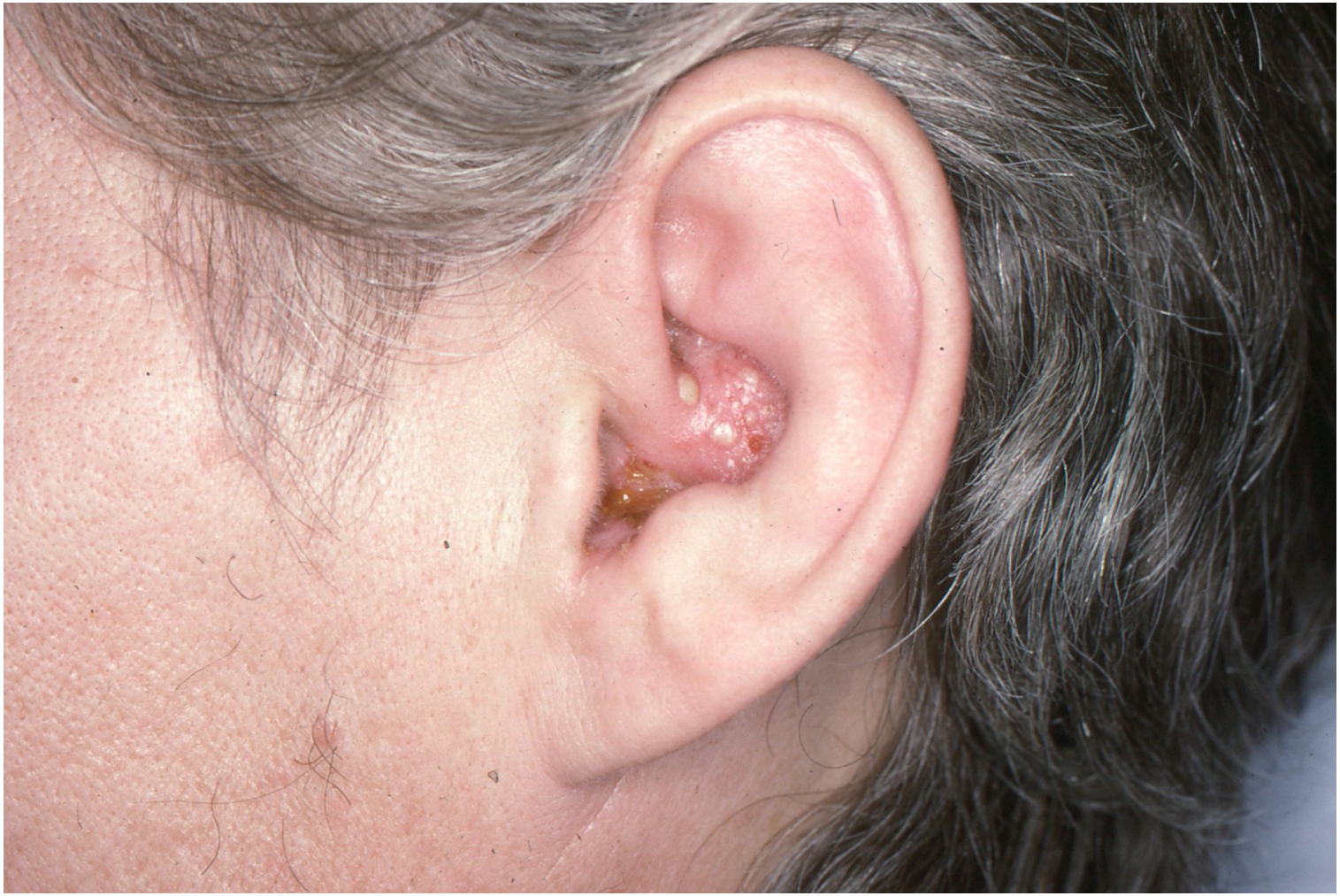
So what is the diagnosis?

The X-ray shows the classical appearances of a hiatus hernia behind the heart!



This man complained of left sided facial weakness and also could not close his left eye. What is the diagnosis?

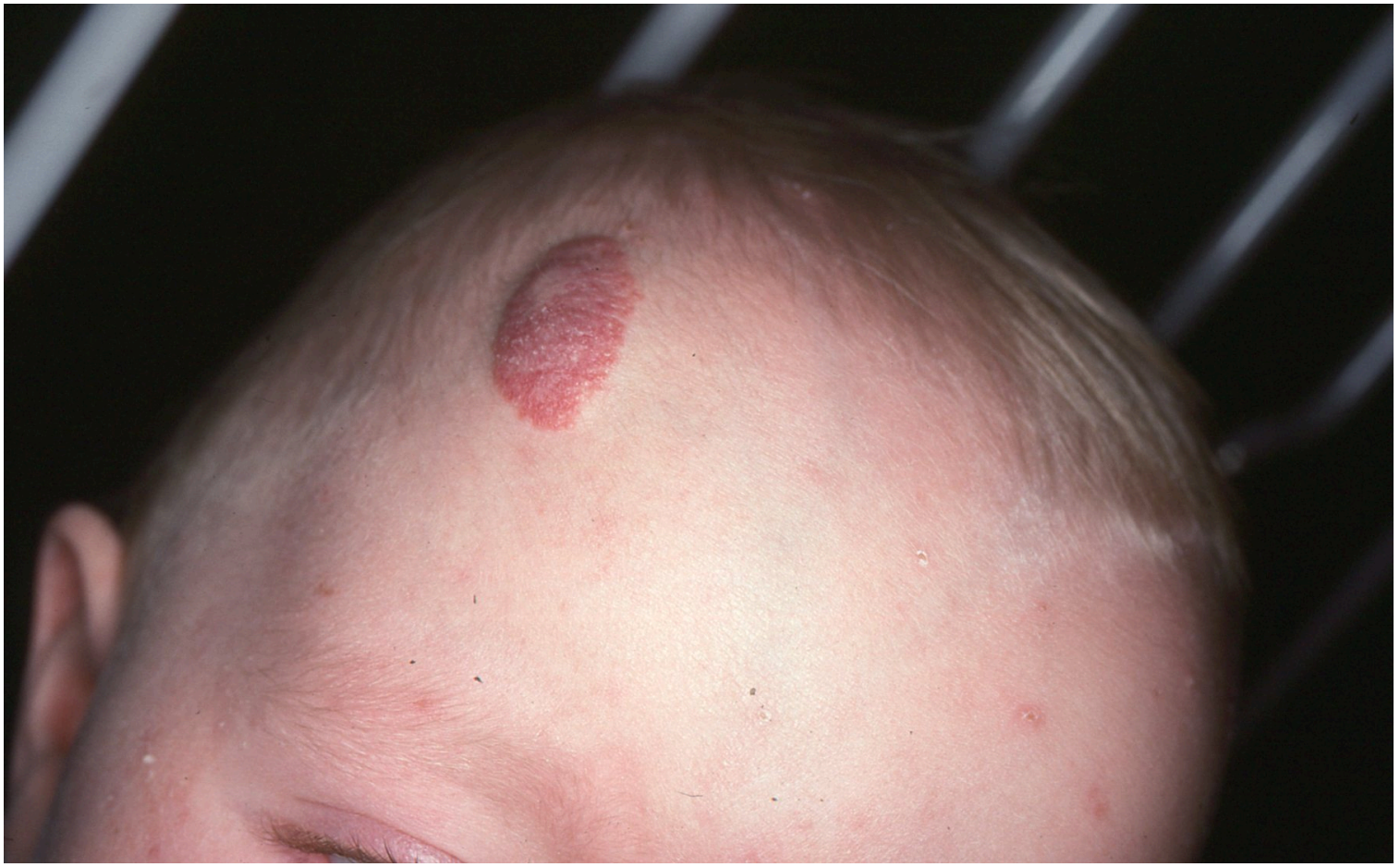
A left sided lower motor neurone facial nerve palsy.



This was the appearance of his left ear. What is the name of the diagnosis?

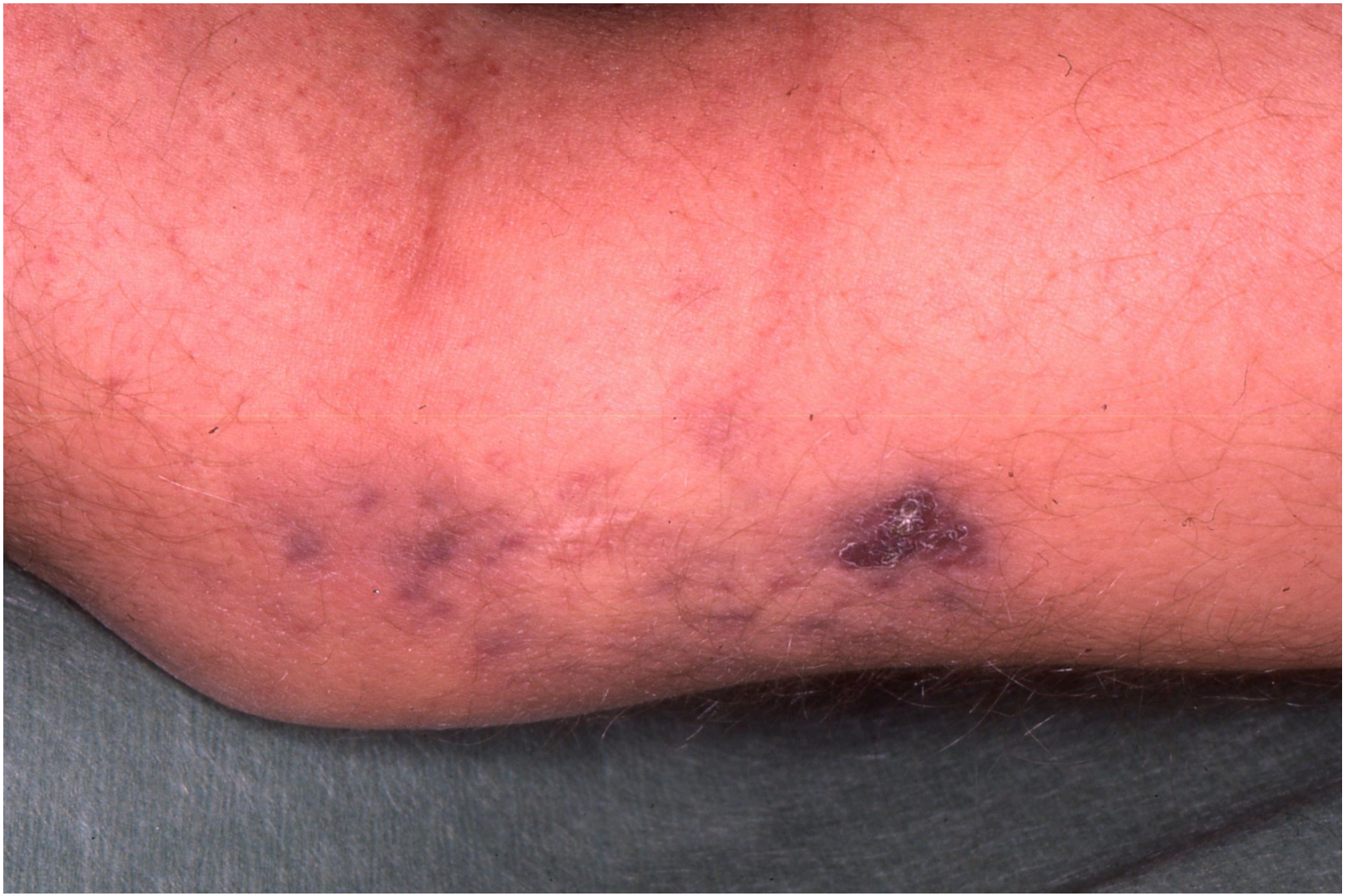
The Ramsay Hunt syndrome. He has (herpetic) vesicles in his external auditory meatus. In this case *Herpes varicella zoster* virus was responsible.

Most cases of acute onset lower motor neurone type facial palsy (Bell's palsy) have been shown to be caused by *Herpes simplex* virus. Unfortunately by the time the palsy has manifested it is too late for aciclovir to be of much help.



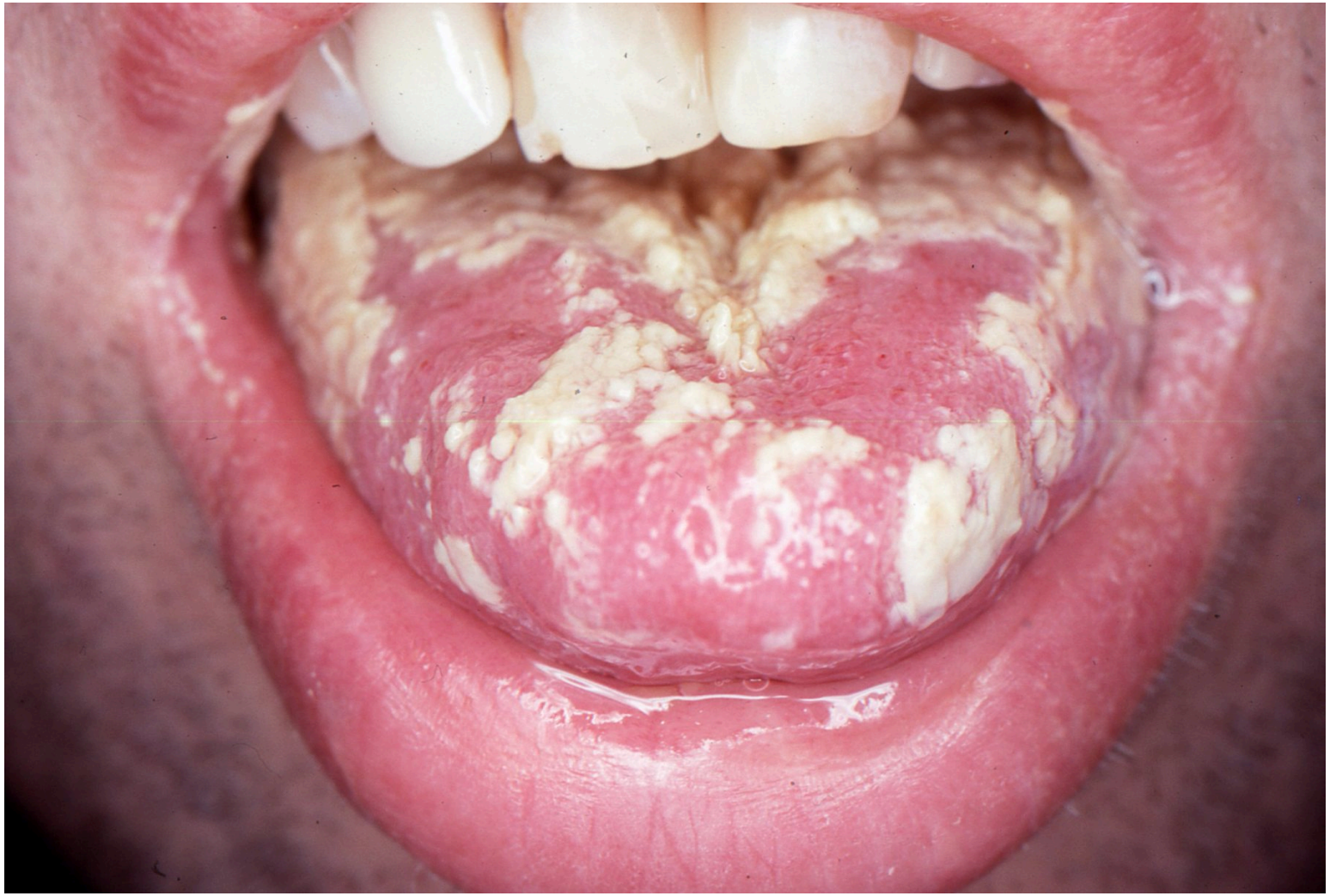
What is this and what action should be taken?

This is a strawberry naevus. Usually no action (other than reassurance) is necessary. The vast majority atrophy with the passage of time.



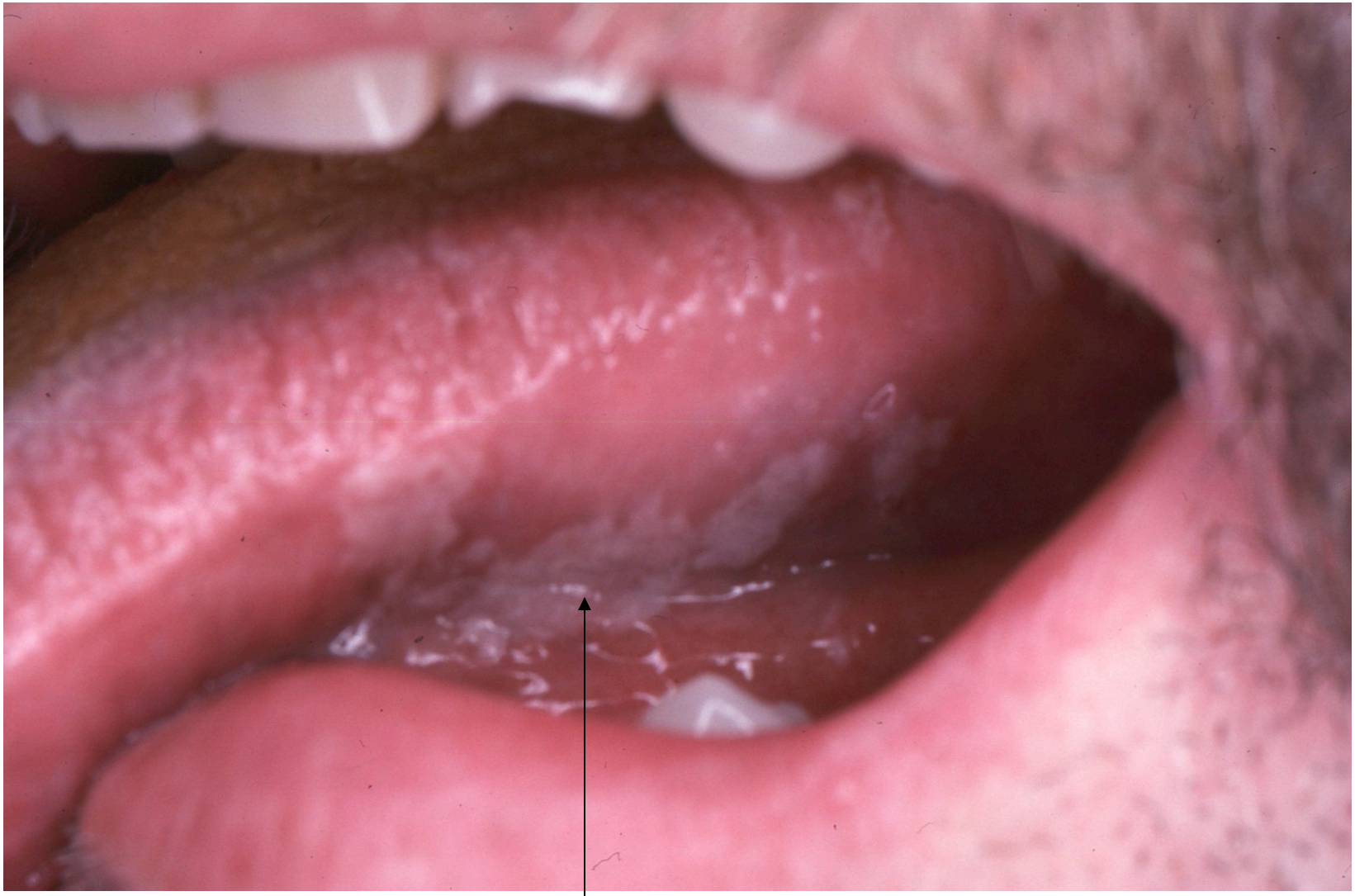
This man was gay. What is this lesion and would surgical removal be helpful?

The large lesion is a Kaposi sarcoma, as are the multiple surrounding lesions. Even if solitary, surgical removal is unlikely to be helpful (unless the lesion is in an anatomically dangerous position) because they are invariably multiple with lesions elsewhere in the body, either externally or internally. Interestingly they are not found in the brain.



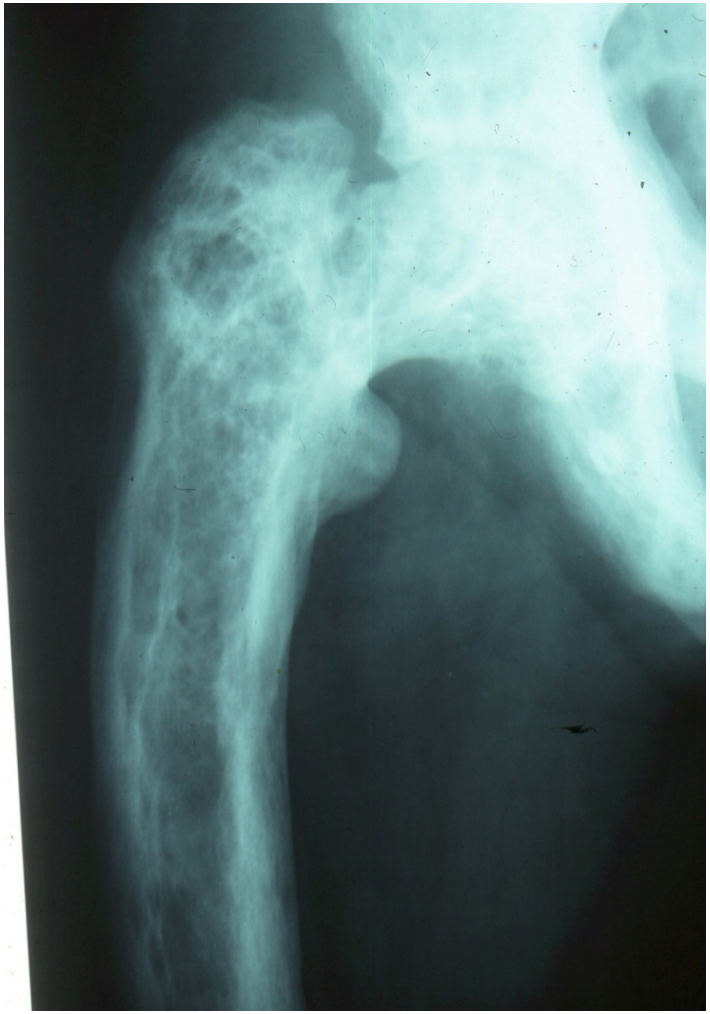
What is this? And what underlying pathology might be present?

This is gross oral candida. Although conditions such as diabetes and antibiotic therapy can cause candida it rarely approaches this extent. The possibility of severe Immunosupression (usually involving cell mediated immunity rather than antibody mediated immunity) should be addressed. In a young otherwise well-seeming individual the possibility of HIV arises.



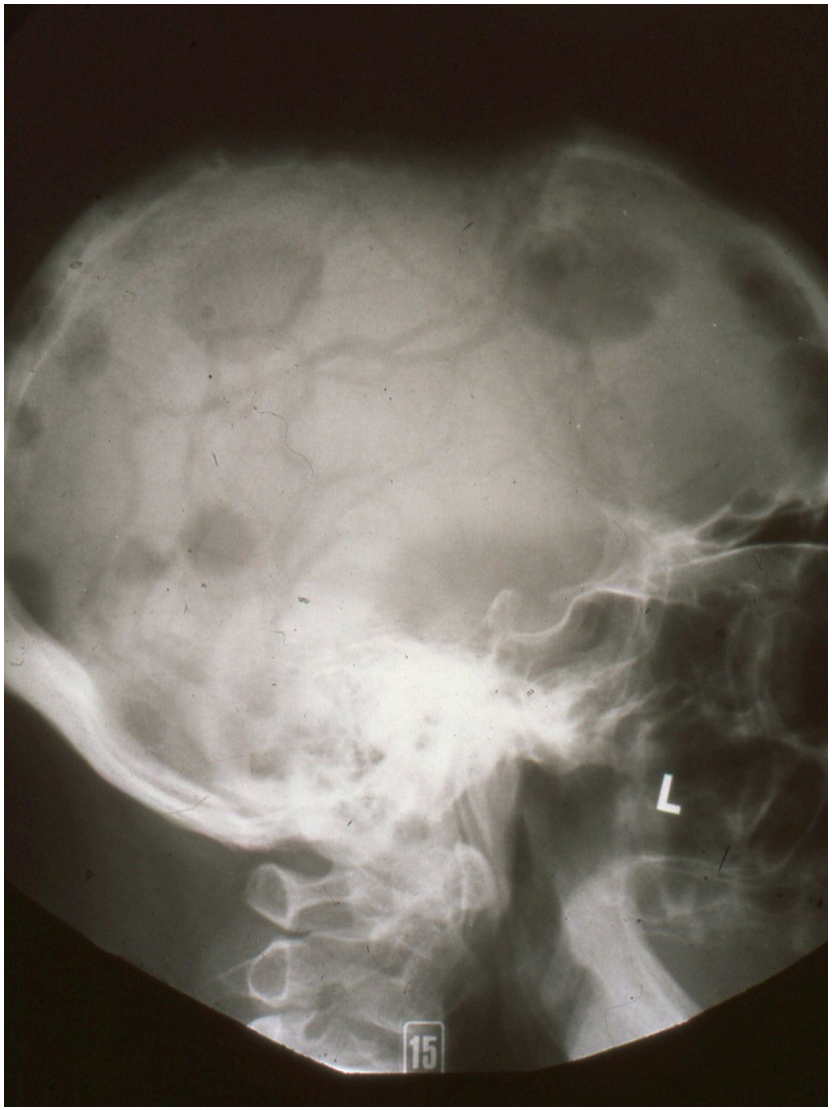
What is this?

This is hairy leukoplakia and is a marker of significant chronic immunosuppression, usually associated with HIV. Very rarely it can be caused by therapeutic long term Immunosupression.



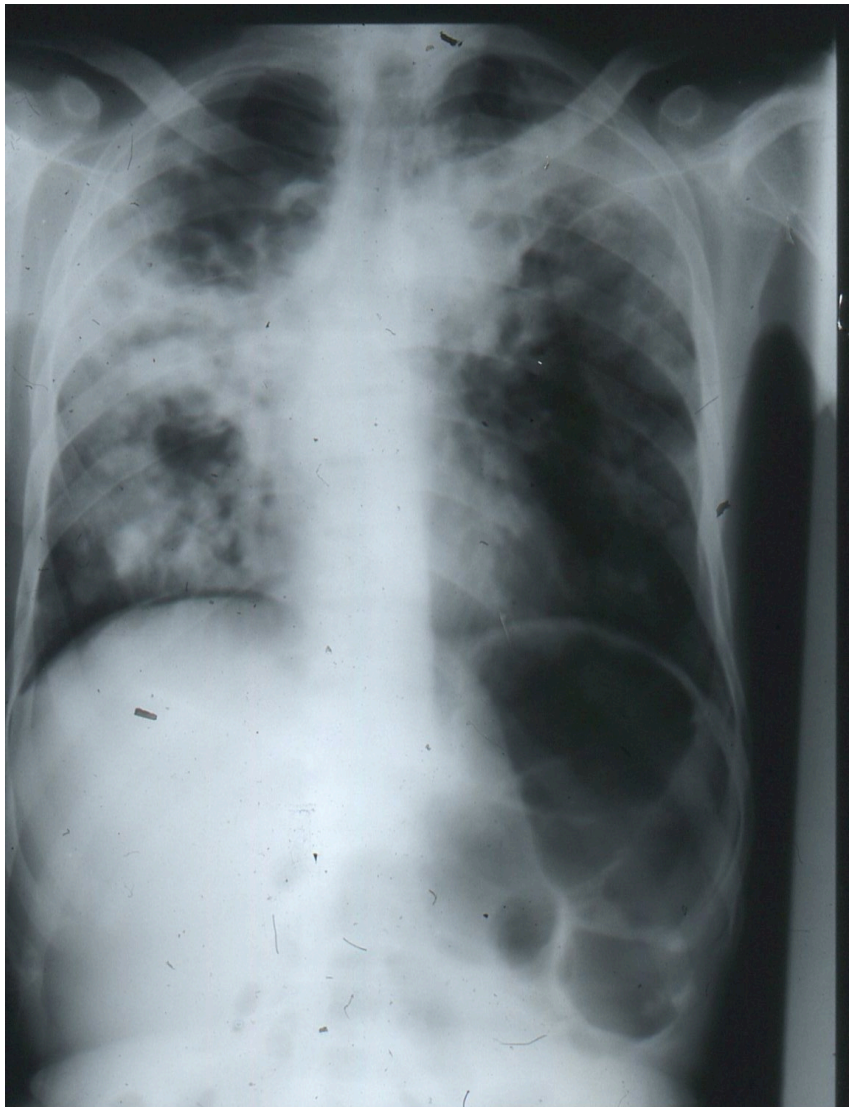
What is the diagnosis?

Paget’s disease. Pathological fractures may occur. The alkaline phosphatase levels are usually very high.



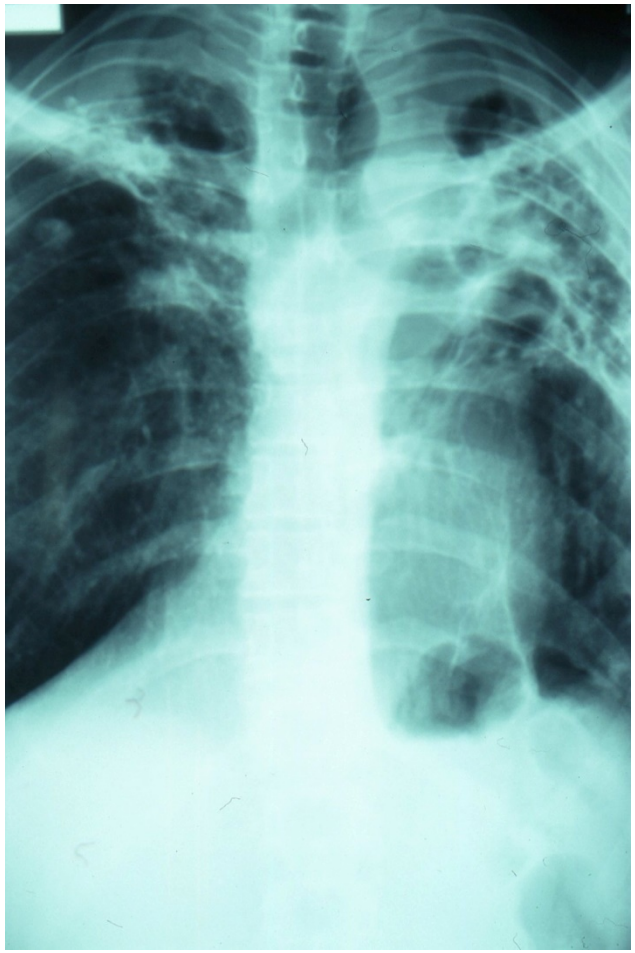
How is this appearance classically described? And what is the diagnosis?

This is a Pepper pot skull. There are areas of osteolytic activity with no surrounding osteoblastic activity and this is typical of multiple myeloma. In the early stages the alkaline phosphatase may be normal as osteoblastic activity is usually responsible for elevating the blood alkaline phosphatase levels



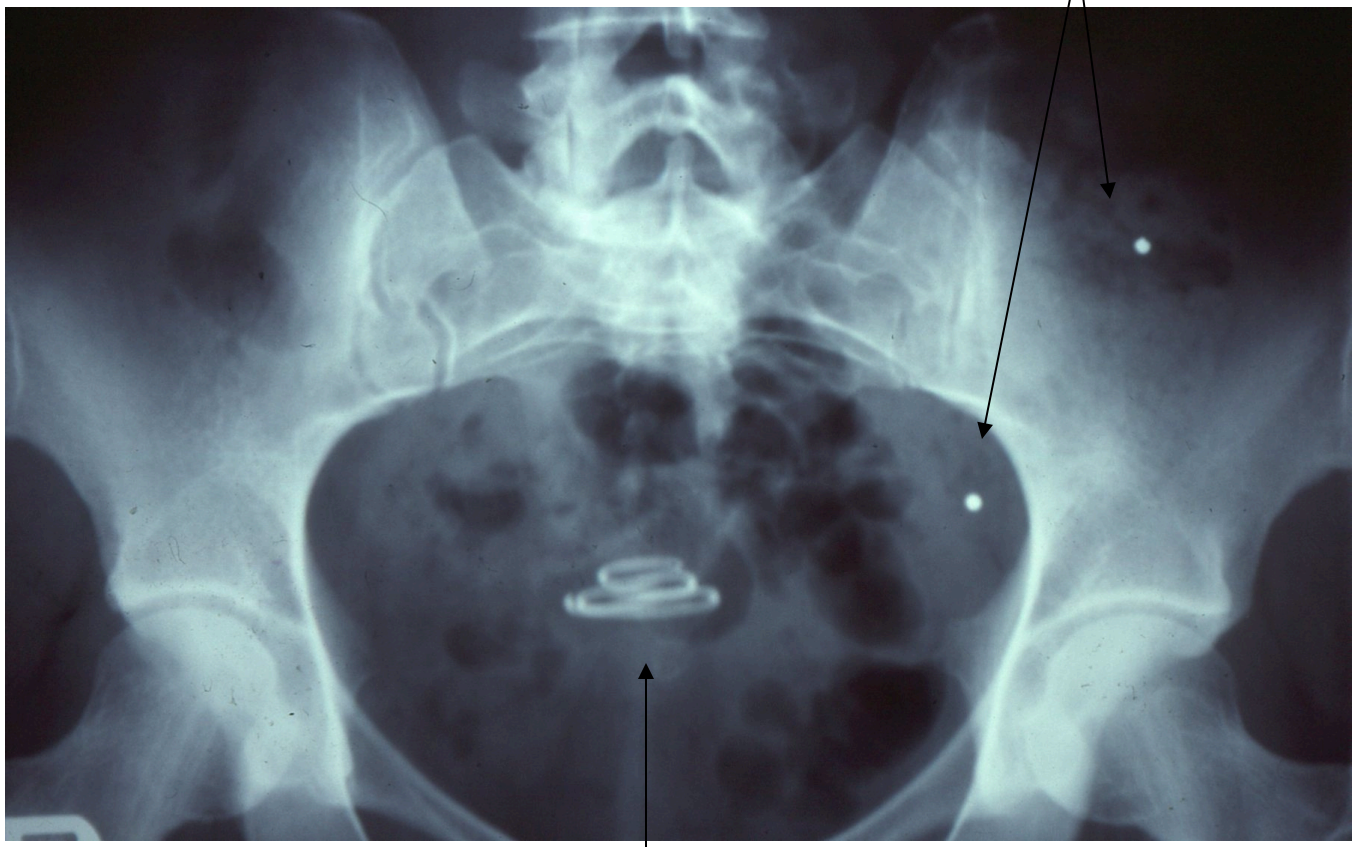
This man had been sweaty for months and had lost a lot of weight. What is the diagnosis? Is the disease process active? What should be done?

This is pulmonary tuberculosis. On chest X-ray the three features of TB are cavitation, fibrosis and calcification (with one or two exceptions lungs neoplasms, be they primary or secondary, hardly ever calcify). If TB is active, tubeculoprotein leaks out from active areas and causes much oedema, which absorbs X-rays, and leads to failure of blackening of the X-ray. Oedema is not well defined and thus “fluffy” areas result. So old “healed” TB on X-ray might show cavitation, fibrosis and calcification but if surrounded by fluffy shadowing then the patient almost certainly has active TB. He would almost certainly be sputum positive on culture if not on microscopy and should be isolated immediately and his contacts screened.



These are the X-ray appearances of old “healed” TB. There are no fluffy areas. But be aware that the X-ray might take time to develop worrying signs.

This lady's husband had been hunting. What are these?



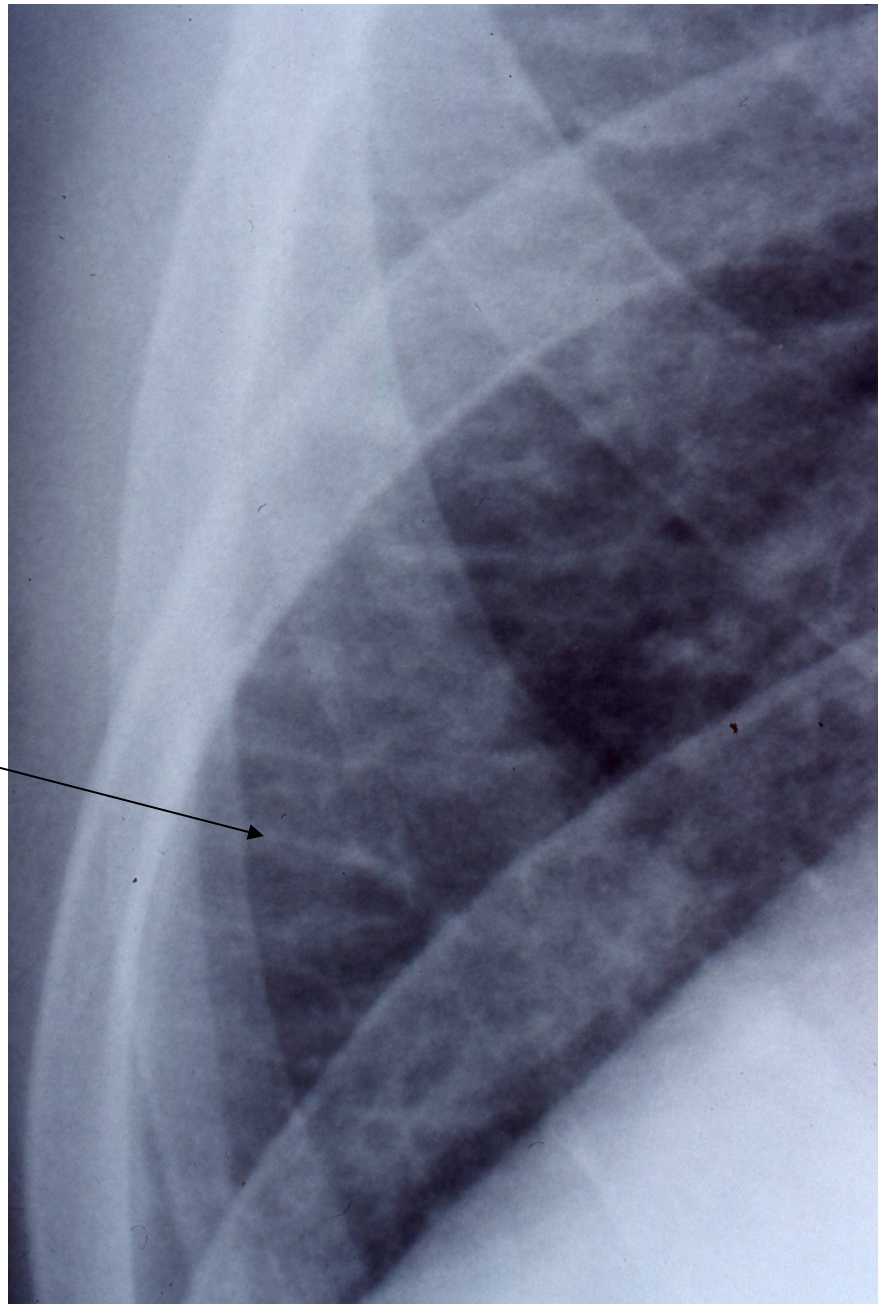
And what is this parasite?

These rounded radiodense areas are typical of lead shot. Her husband had shot pheasants and the cook had prepared these for her consumption (I suspect people who shot pheasants do not do their own cooking).

The “parasite” is an intrauterine contraceptive device.

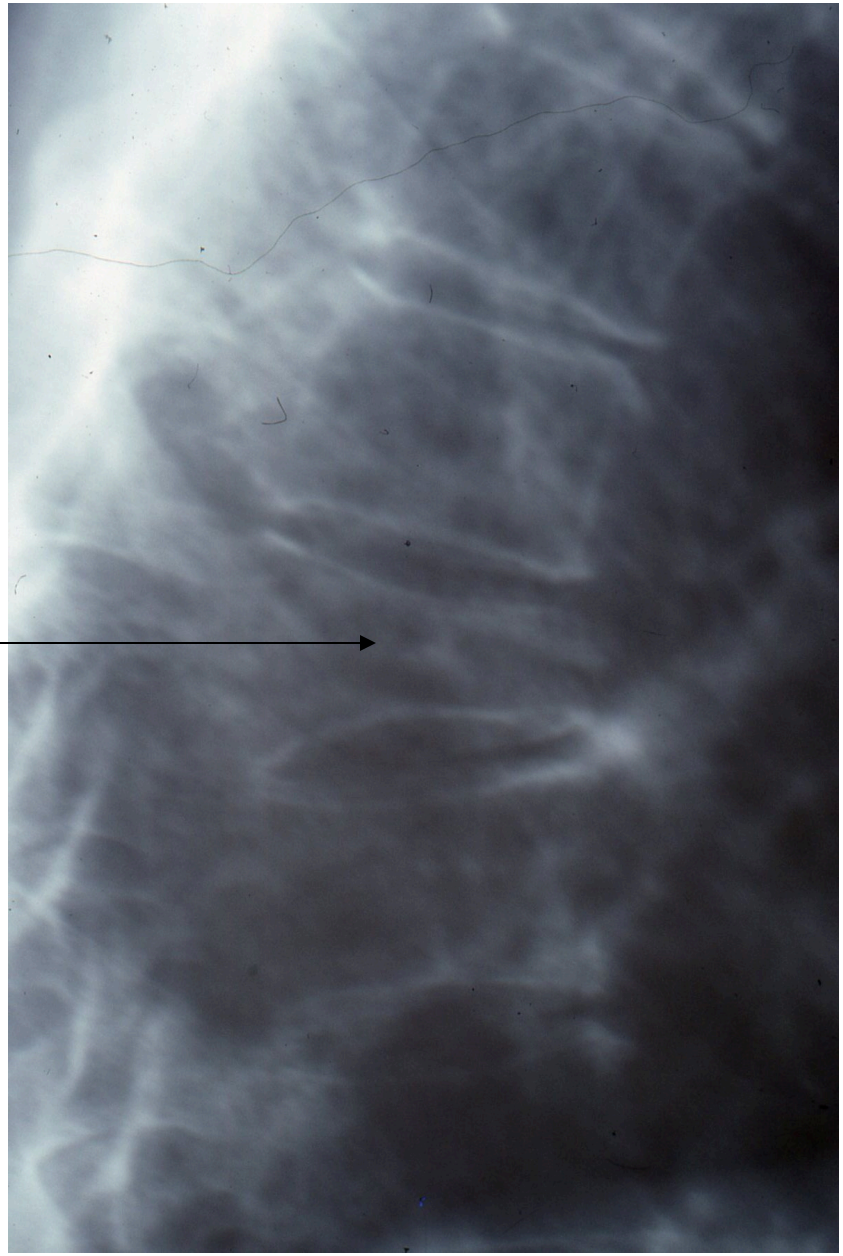
What are these lines?

And what do they signify?



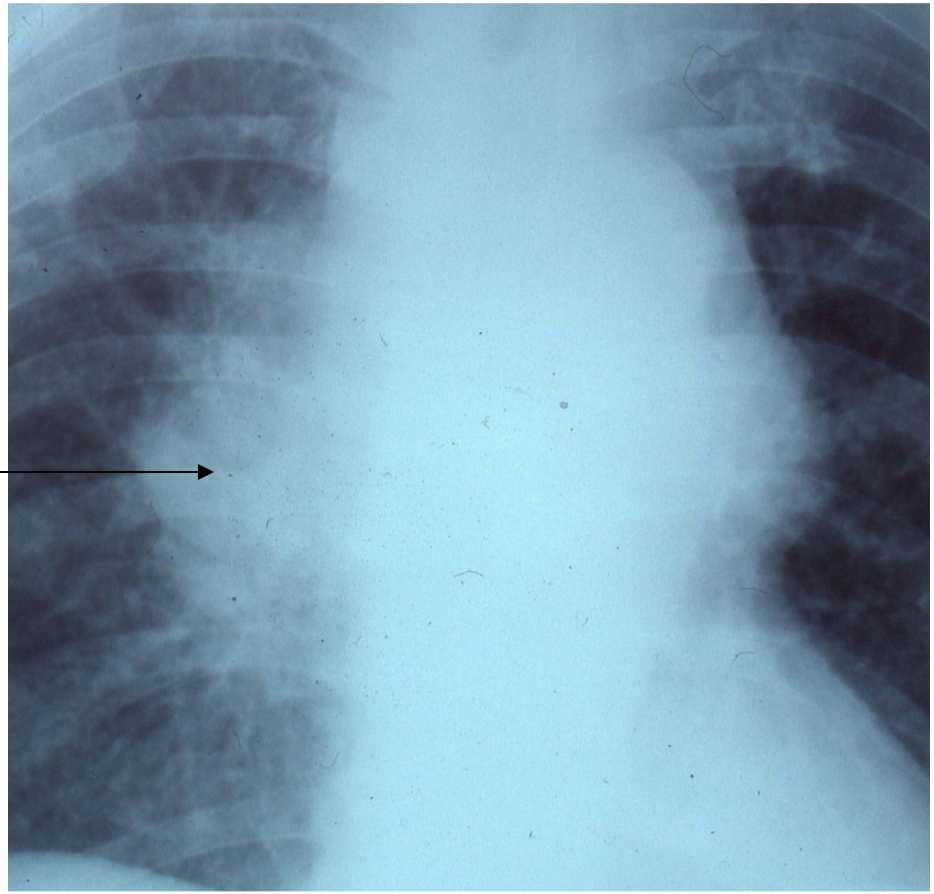
These lines are Kerley B lines and represent interstitial oedema, the most common association of which is left heart failure (the right ventricle continues to pump blood into the lungs but the left heart fails to take it away – hence oedema develops).

What is this?



This is a crush fracture. It may have been caused by compressive trauma, but infection on or neoplasia may be responsible. Myeloma may present with back pain, crush fracture, and a high ESR.

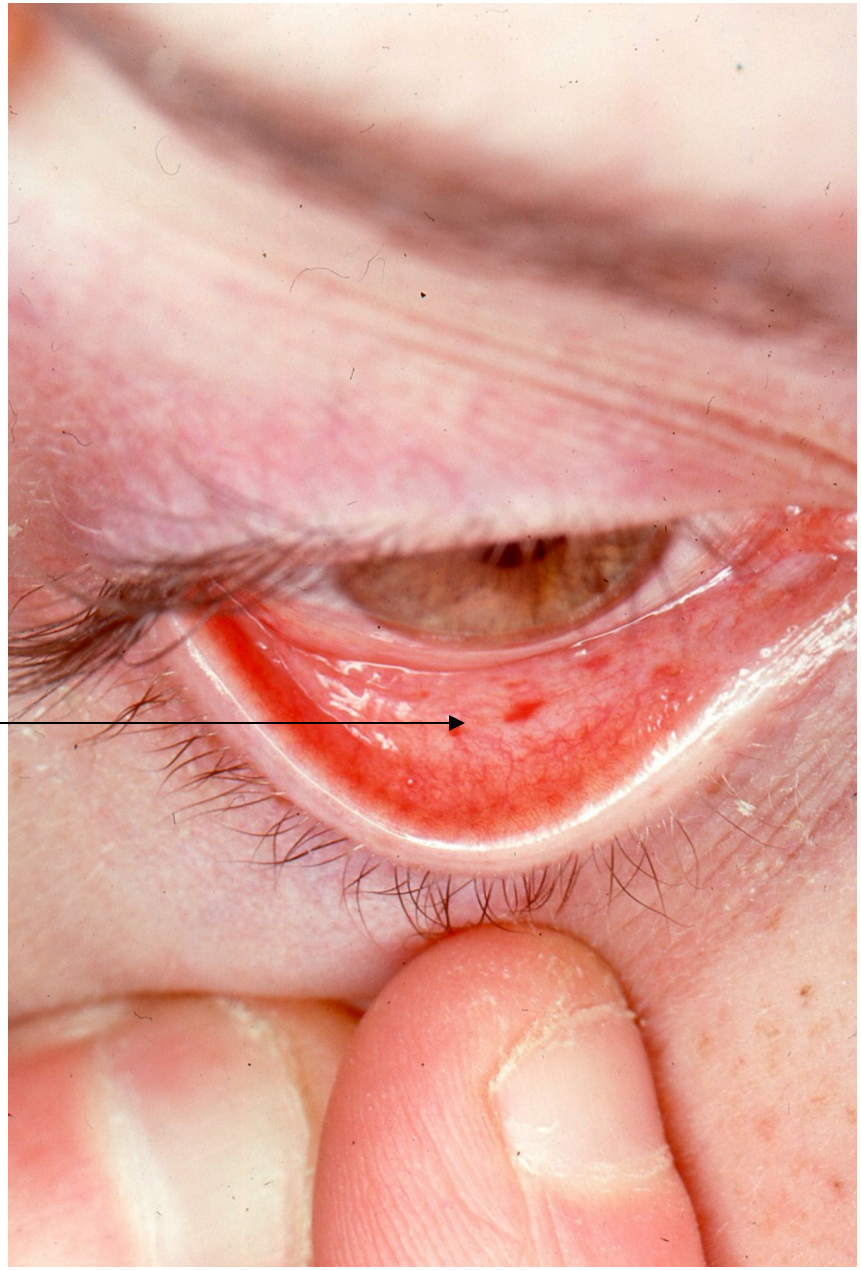
What is this likely to be?



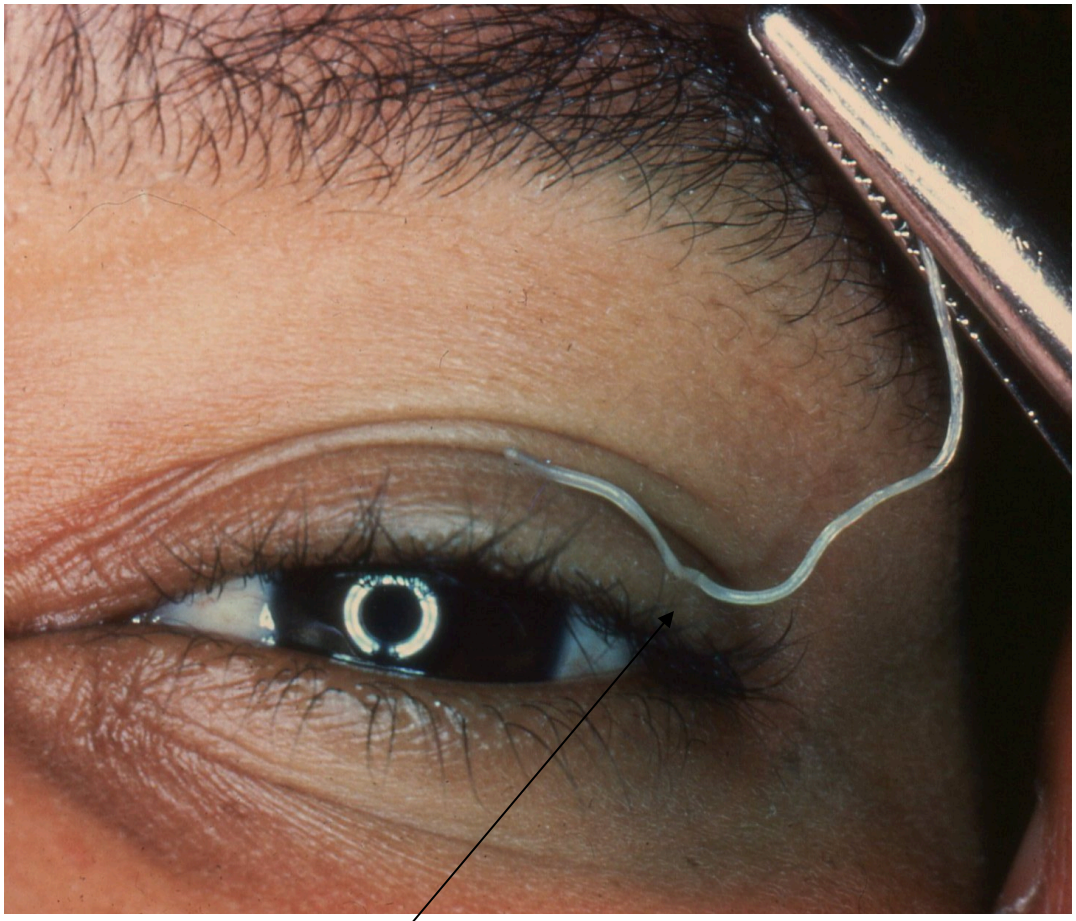
A primary lung neoplasm. Always look for X-ray evidence of secondaries in the bones.
If present they would make the diagnosis almost certain and would mitigate against surgery.

This man was febrile with generalised aches and pains.

What are these and what is their likely significance?

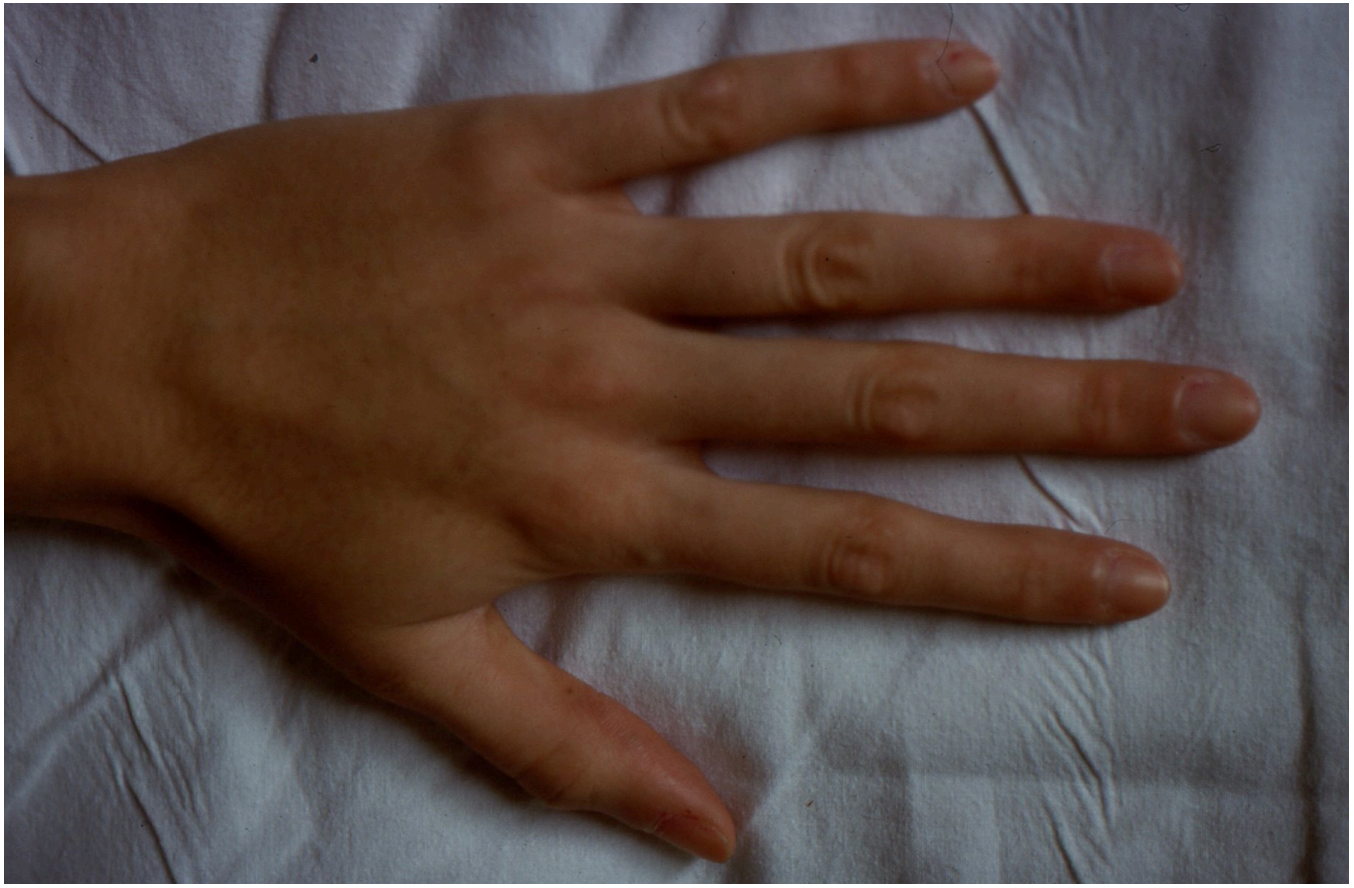


These are small conjunctival haemorrhages. In the context of someone febrile and unwell these should always make one suspect septicaemia. This patient had low grade meningococcal infection and had no petechial spots anywhere else. The blood vessels in the conjunctivae are hardly supported at all and are thus more likely then most to leak. Occasionally a severe coughing bout can cause conjunctival haemorrhage, as can various blood disorders.



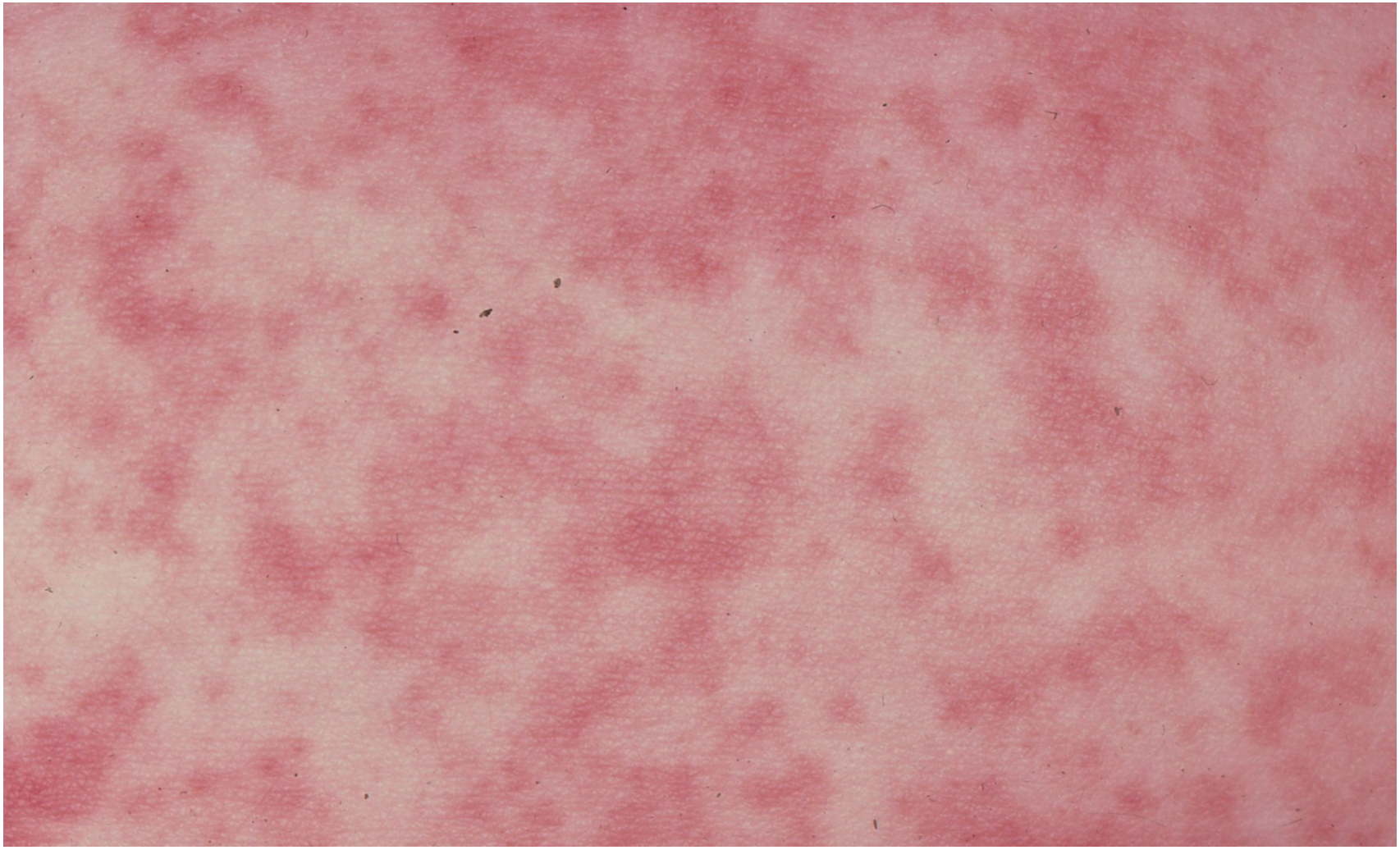
What (on earth you may ask) is this?

This is a Loa loa worm, a filarial worm acquired in West African rain forests.



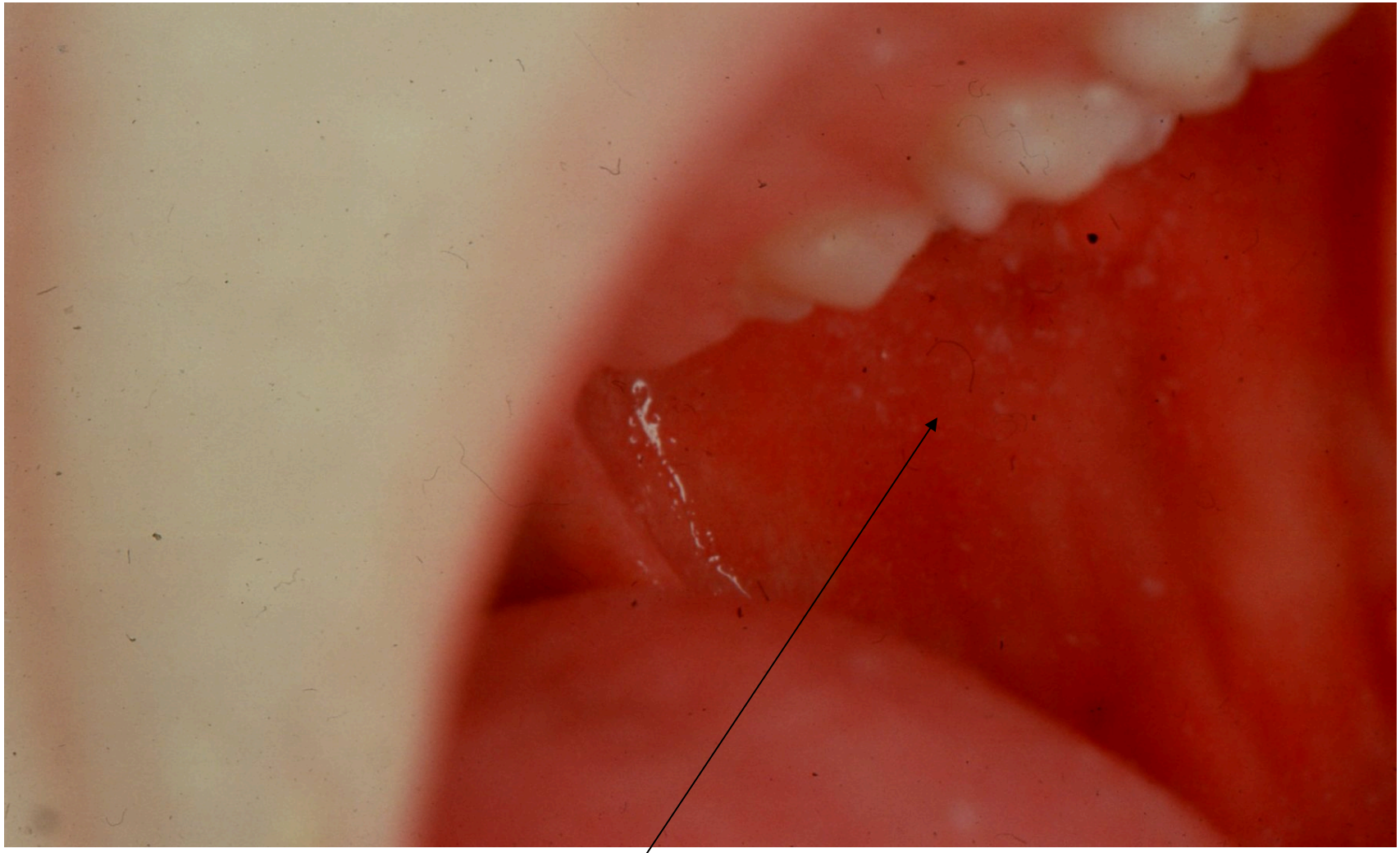
This lady had been referred for screening because her brother recently required urgent surgery for “a devastating heart condition.” What does this picture show?
What was her bother’s condition likely to have been?
What complications could she suffer?

This lady has long thin fingers which occur with Marfan's syndrome.
Her brother presumably had this and had dissected his aorta.
She would also be at risk of this.



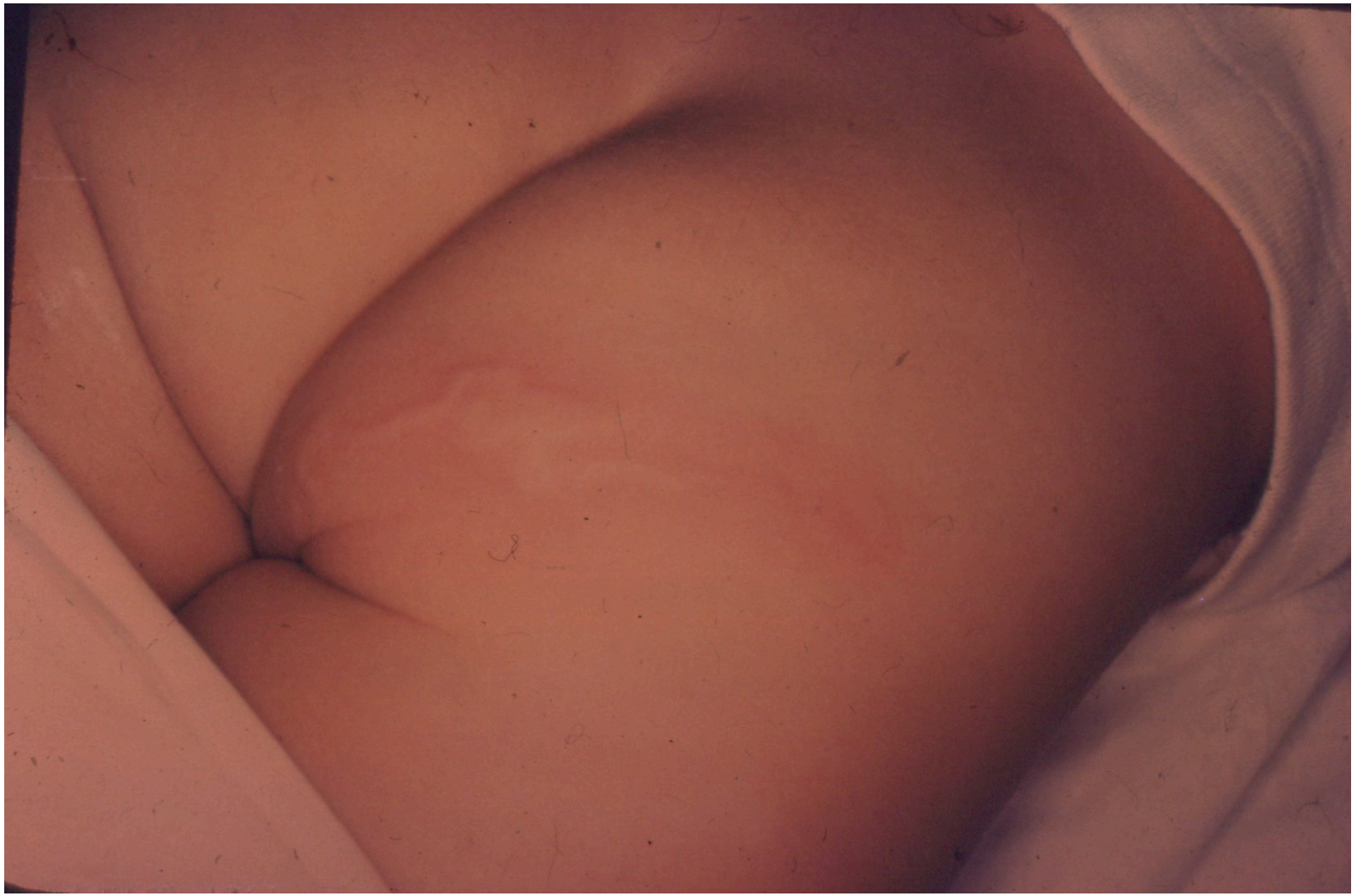
An adult developed four days of fever and malaise and then developed this skin rash. What are the most likely causes?

This appearances of this rash are hardly diagnostic: the major cause include an allergic drug reaction or one of many viral infections – Coxsackie, ECHOvirus, Glandular fever and so on, but appearances in the next picture (which had been noted before the rash erupted enabled the doctor to predict the rash and make the diagnosis).



What are these and what is the diagnosis?

These are Koplik's spots and they are diagnostic of measles. They disappear once the rash has erupted. It turned out that the patient had never been vaccinated and had recently returned from a trip to the Amazon, where he presumably came into contact with a child with either measles or prodromal measles (the unvaccinated in the UK are unlikely to get measles as herd immunity is high so the chance of an unvaccinated person being in contact with measles is very low (particularly as there is no carrier state).

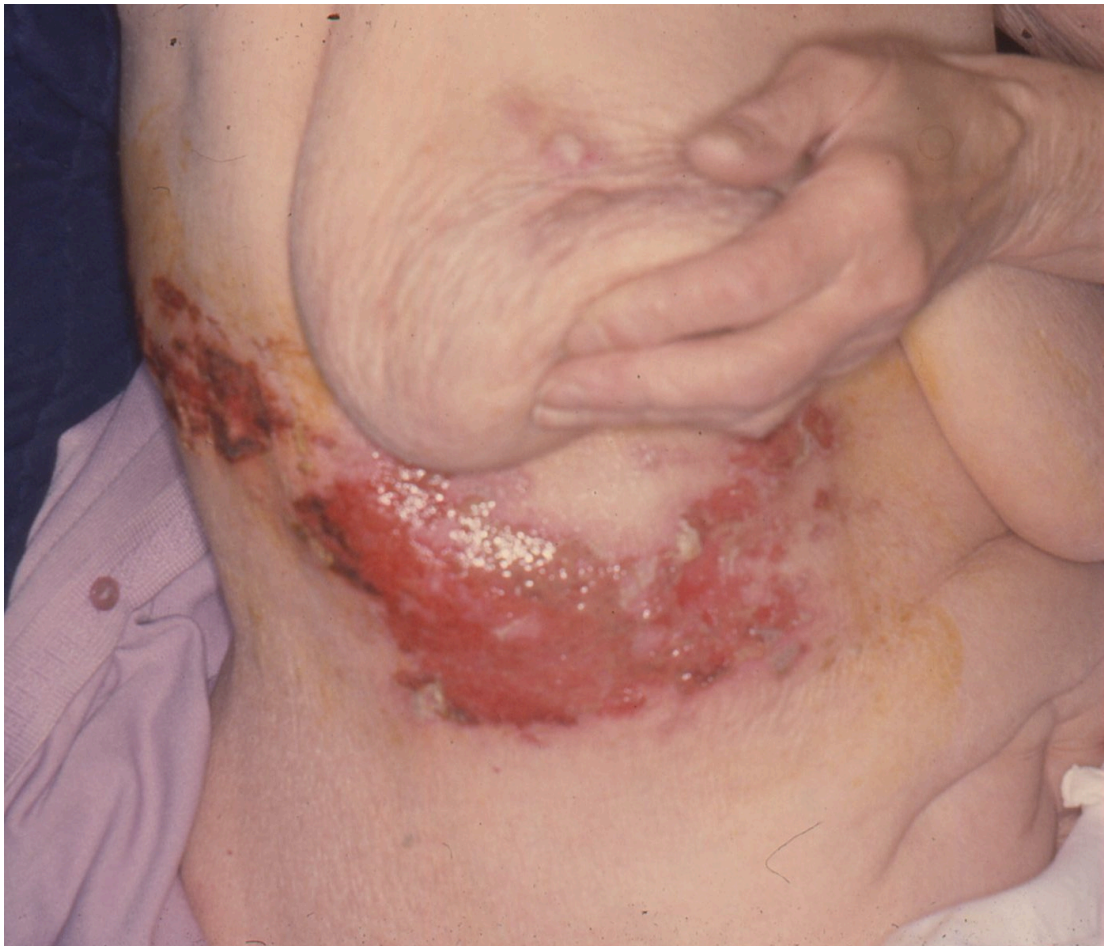


This child had recently returned from Malawi and had an intensely itchy rash that “ ran around his buttocks.” What is it?

This is cutaneous larva currens (the rash you will remember, ran around his buttocks), and is caused by *Strongyloides stercoralis* larvae

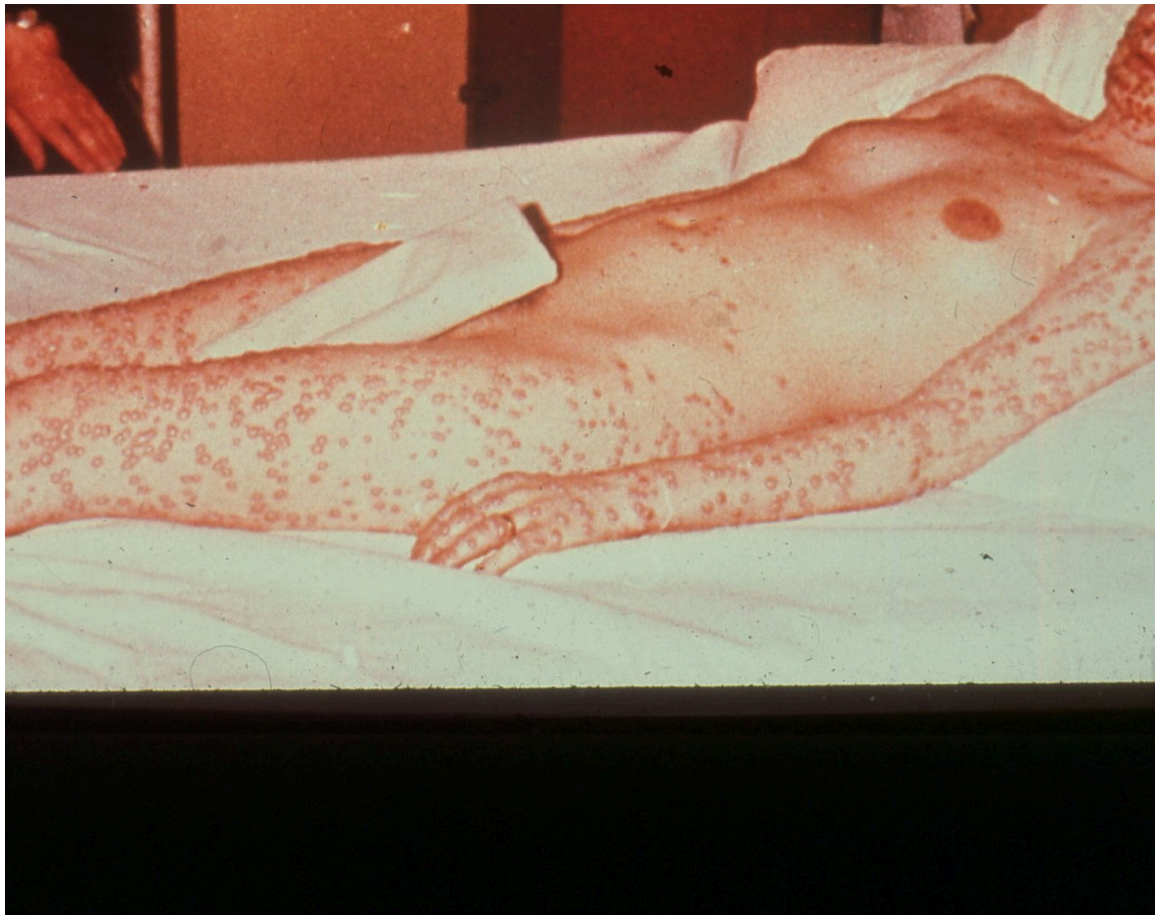
This is a human pathogen and he must have been barefoot and had stood on an infected human stool (perhaps when he was visiting a bush latrine?) The larvae penetrates the skin, travels in veins and/or lymphatics to the lung, up the bronchi and over into the gut, where the larvae mature, mate and give rise to further larvae which are then excreted in the stool (we humans have such a staid lifestyle compared to this). The infection can persist for life, because larvae can penetrate the host's gut or perianal skin to complete their life cycle within the host.

This is shingles. You will note she has a bump above her nipple. This was a breast cancer. Was it likely to be relevant to the attack of shingles?



It is difficult to say in this particular instance. However research has shown that, in general, shingles is rarely a presentation of *unsuspected* malignancies. Everyone knows that patients with lymphoma and leukaemia are likely to get shingles but the point is that the haematological condition presented first and was known prior to the development of shingles.

Similarly, although shingles is mostly a disease of the elderly, it can occur in the young. When I ask medical student groups if any of them have had shingles I usually get a positive reply or two. However never forget that HIV can allow shingles to emerge (usually about 18 months before AIDS itself presents).



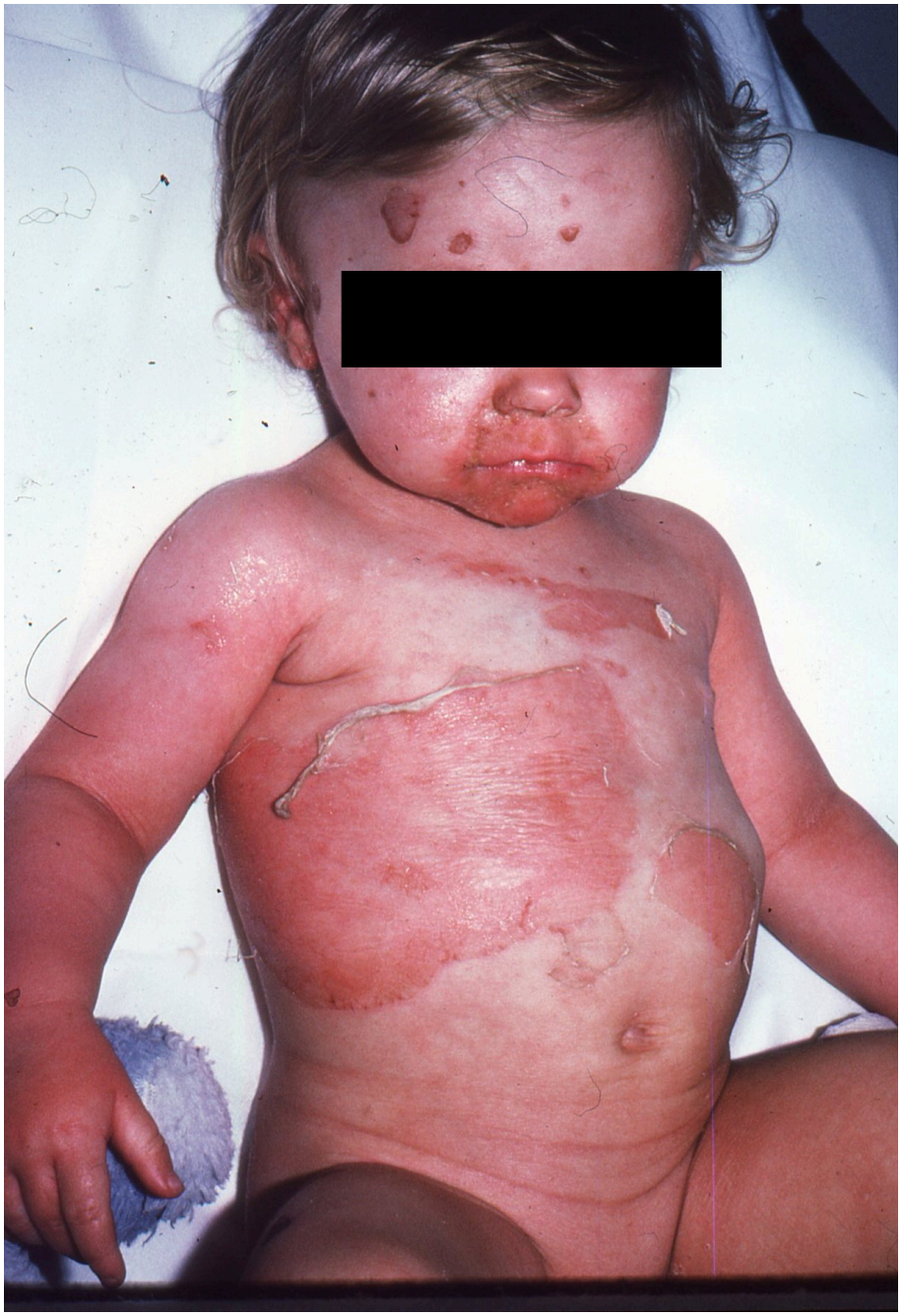
A case from the history books. What is this?

Courtesy of DR RTD Emond

This is smallpox. There is a dense simultaneous eruption of vesicles which have a centrifugal pattern (on the face and limbs). In contrast chickenpox has four to five crops of vesicles over about one week, predominantly centripetal (affecting the face and trunk). Interestingly chickenpox is most dense in the likely areas that shingles favours - on the face and trunk.

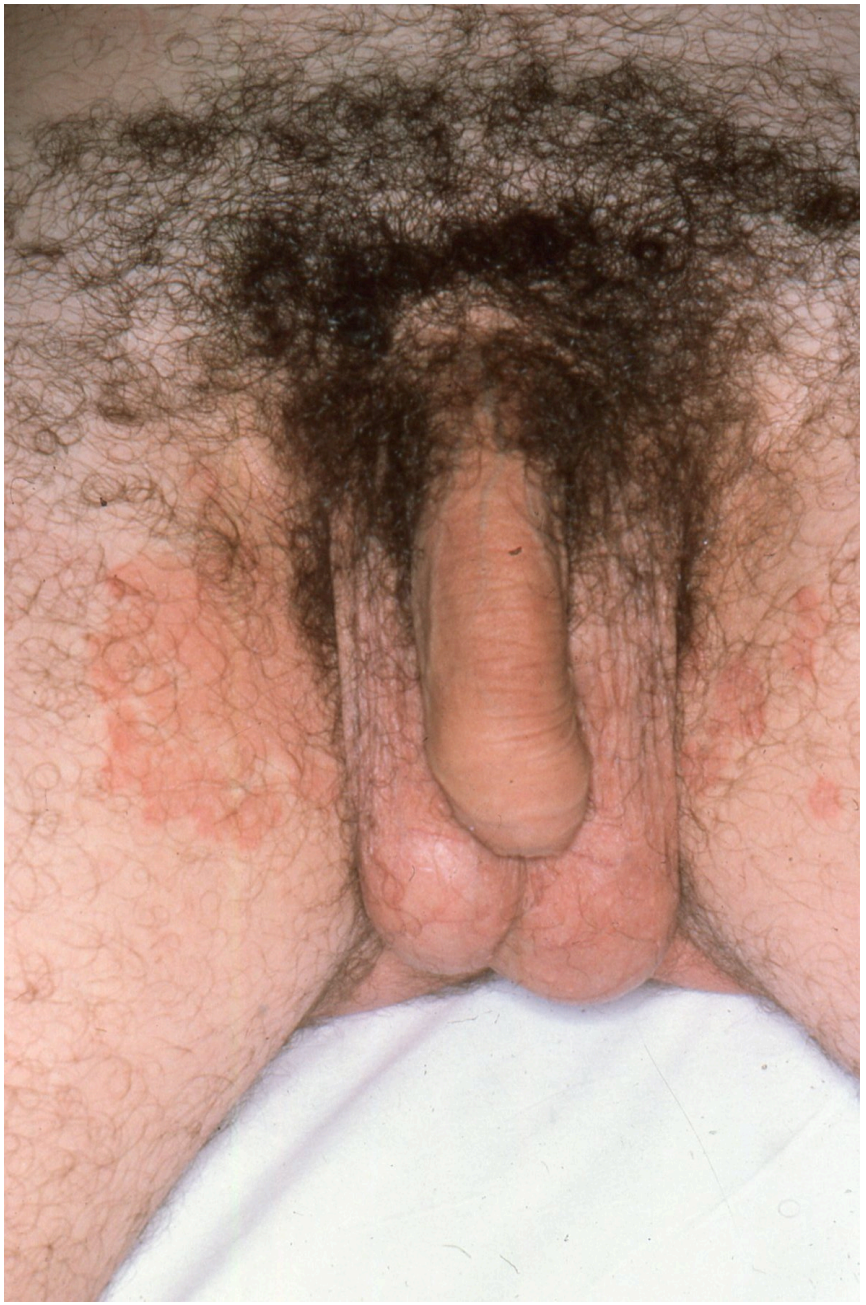
This is a rare condition. Nicolski's sign
Is positive (the skin can be pulled by a finger), an occurrence that can also occur with pemphigus.

What is the diagnosis of this child?



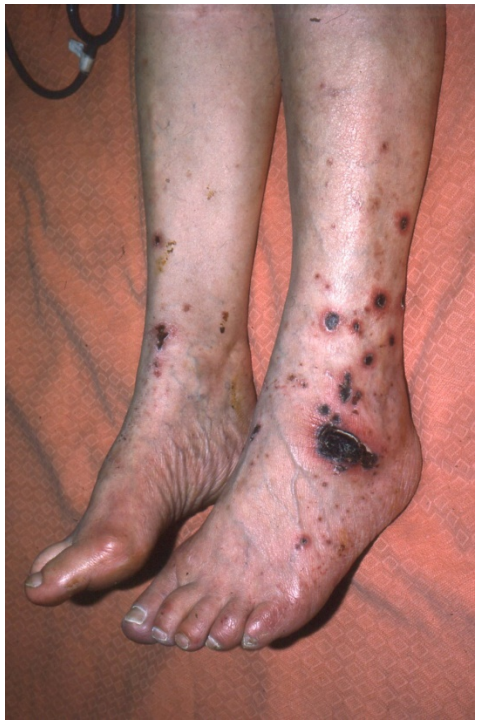
This is toxic epidermal necrolysis, which can be caused by drugs or by a toxin liberated by *Staphylococcus aureus* infection

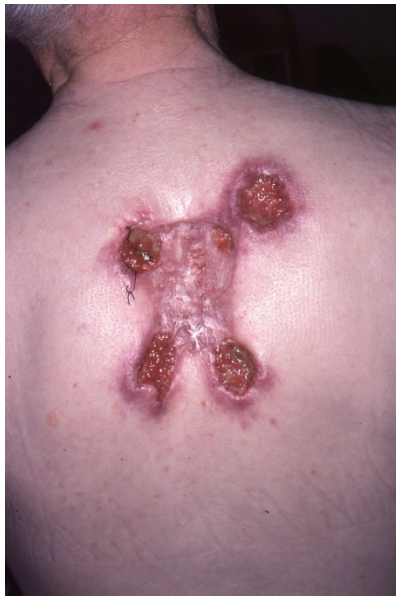
What is this?



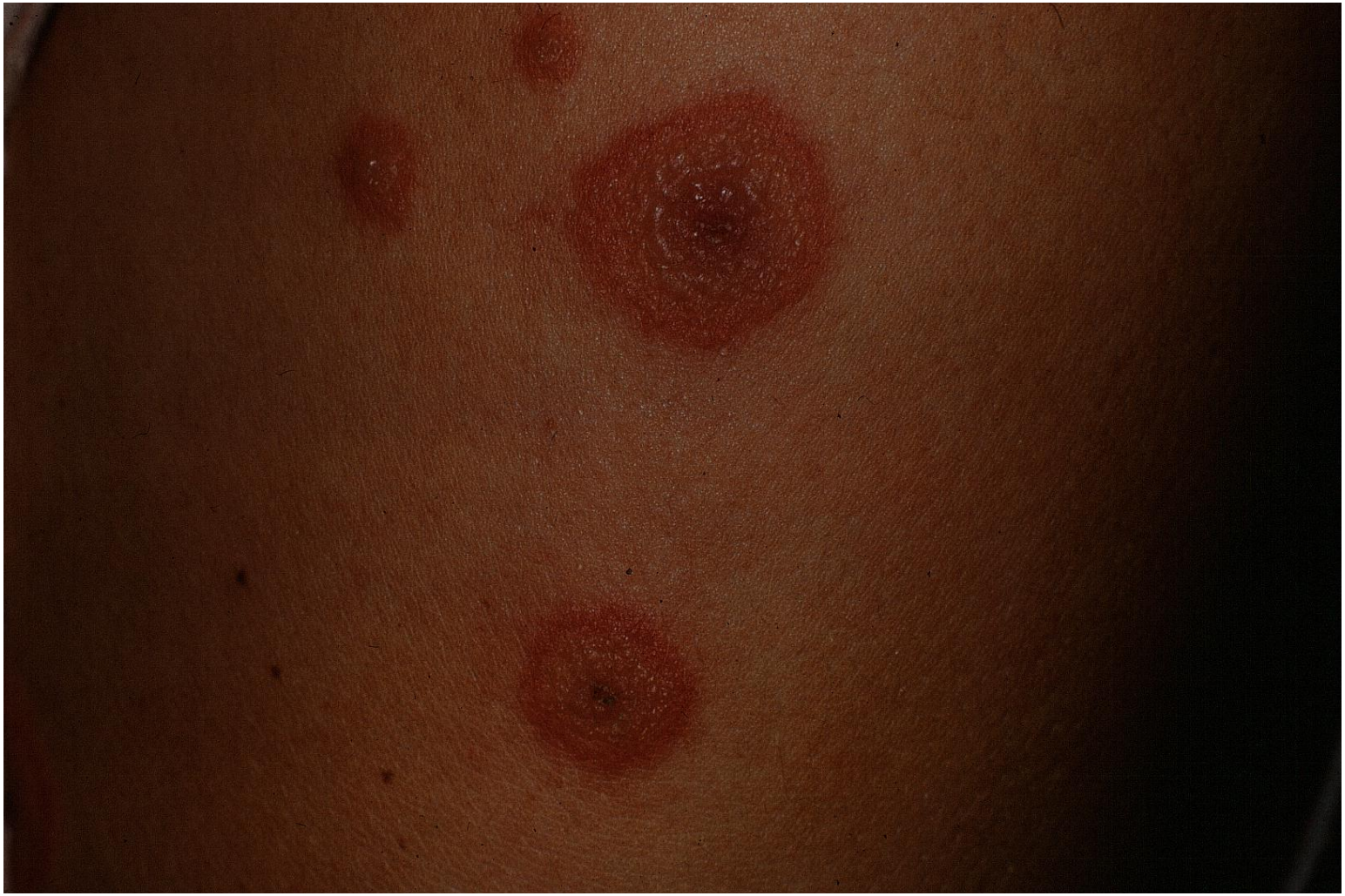
Tinea cruris. A fungal infection of damp areas. Treatment often requires a course of oral antifungal treatment – powders tend to be ineffective and wet preparations tend to make the area macerated.

This man had rheumatoid arthritis, and developed these ulcers. What process has supervened?



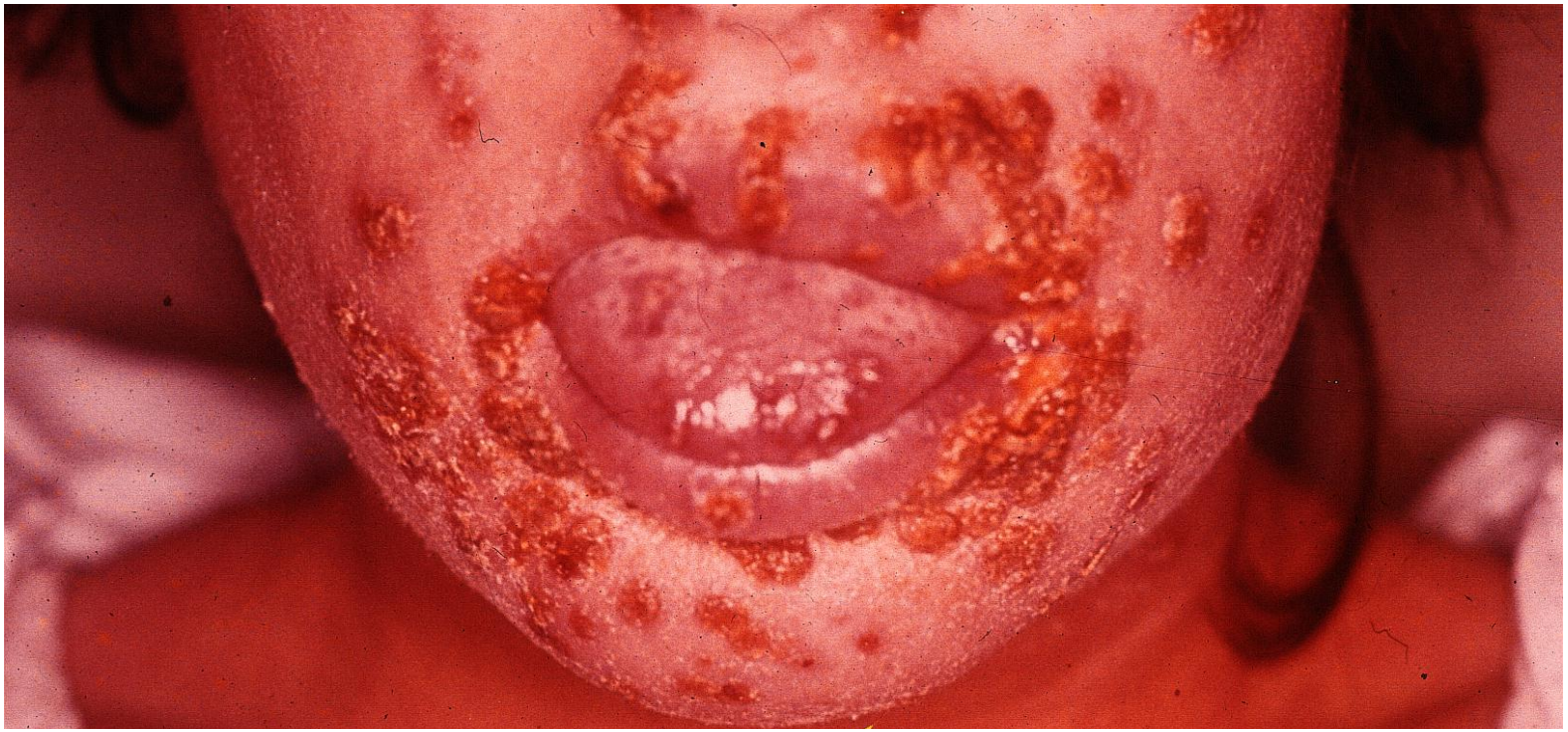


Vasculitis. This classically produces round “punched out” type ulcers.



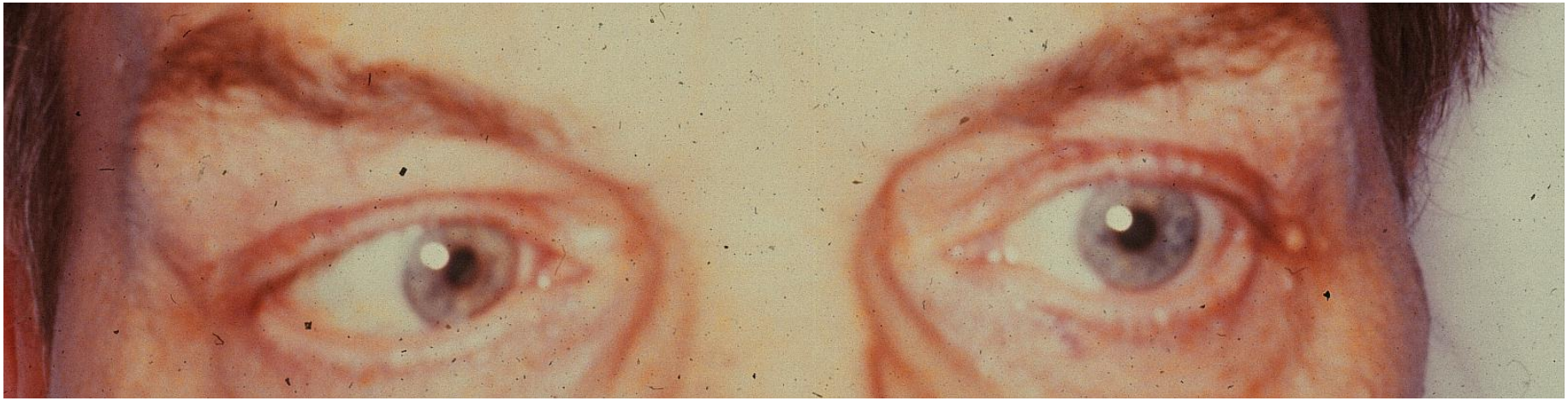
What is the description applied to such lesions?
What are the three most common associations (apart from idiopathic)?

These are the target lesions of erythema multiforme. The most common associations are *Herpes simplex* infection, Mycoplasma infection and drugs (particularly antibiotics).



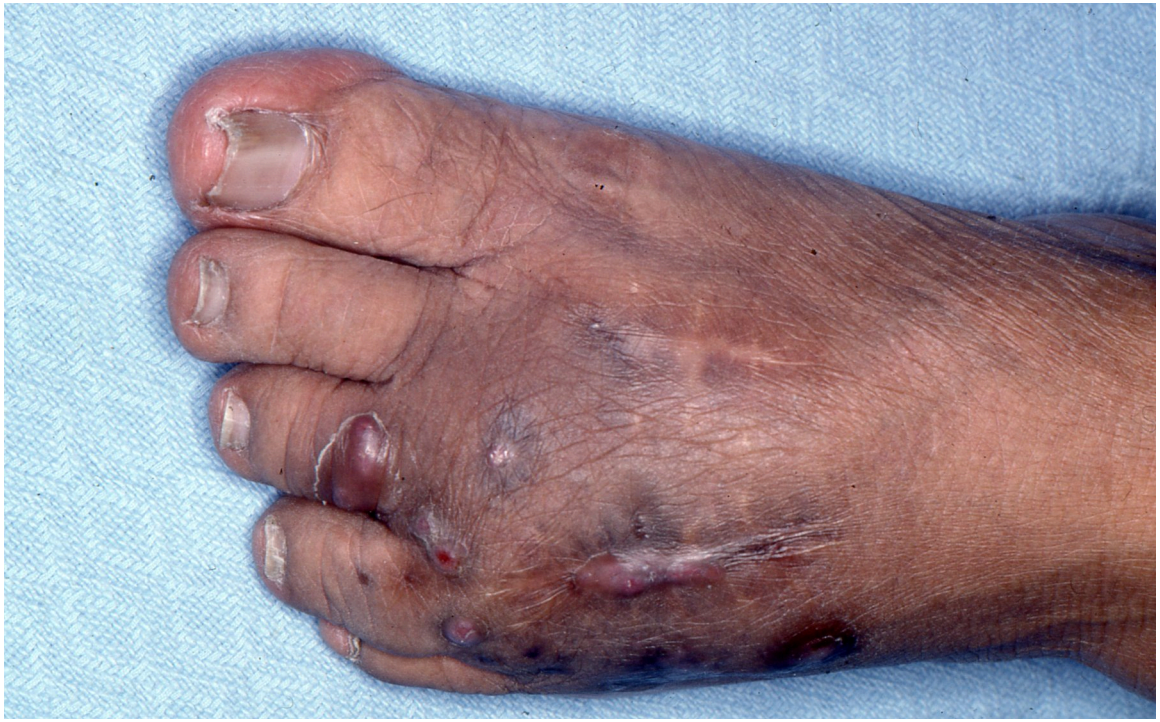
This looks like impetigo but there is one feature that negates this as the diagnosis. She had ecezma, so what is the likely diagnosis?

Impetigo does not cause lesions on the tongue. She had eczema and she has lesions on the tongue so the most likely diagnosis is eczema herpeticum – her eczematous skin has been infected with *Herpes simplex* virus from her mouth.



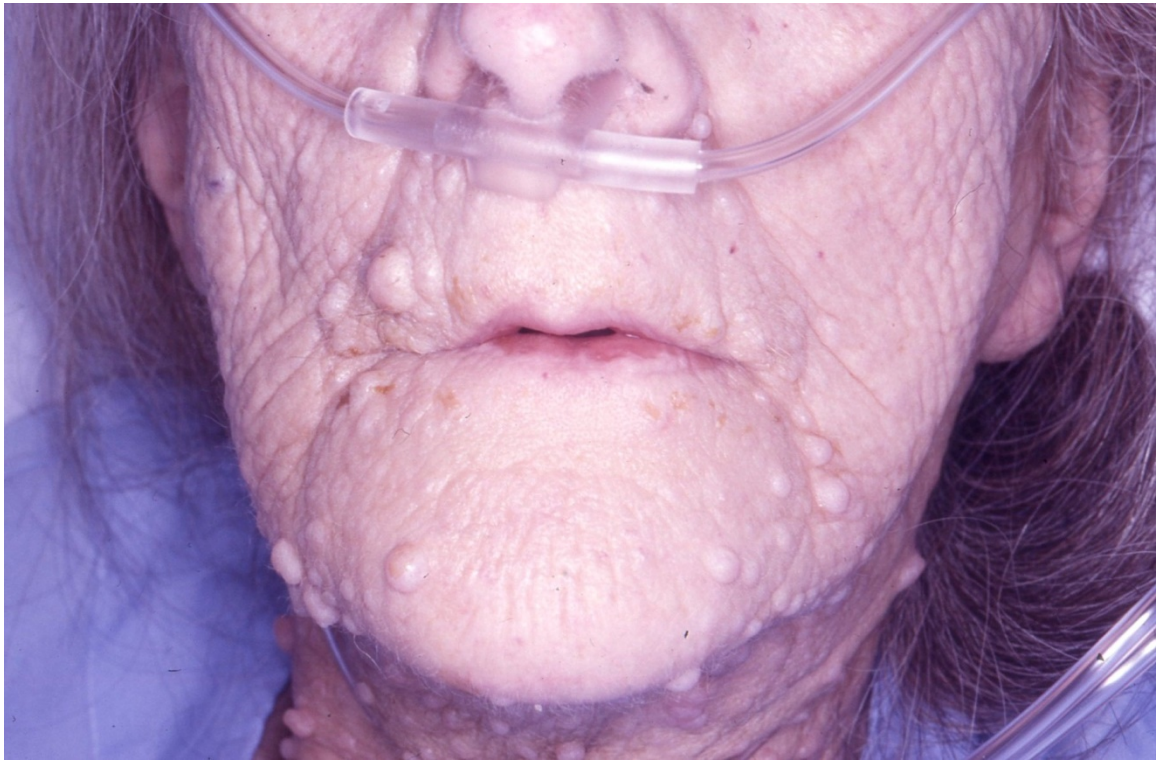
This man had been asked to look to his left. What nerve and muscle are not functioning?

This man has a left abducent (VI) nerve lesion
and thus his lateral rectus muscle does not function



This diabetic patient had this problem for about a year. What might be the diagnosis given that he had spent most of his life in India?

He might well have chronic fungal infection “Madura foot.” – sinuses that discharge purulent exudates with fungal colonies therein. It most commonly occurs in those who have been bare footed and in those who work on the land.



What disease is this? How is it inherited?

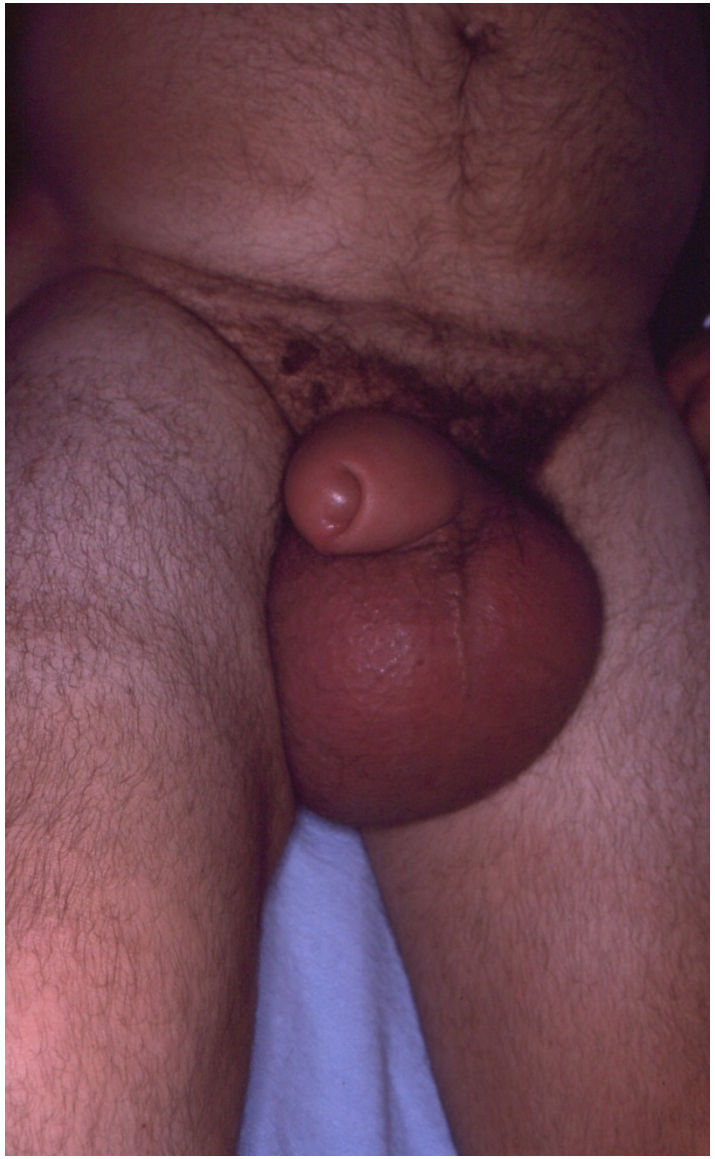
This is neurofibromatosis, Von Recklinghausen's disease.
It may be caused by a spontaneous genetic mutation (and thus have no previous family history) but the usual pattern of inheritance is autosomal dominant. Half of children are affected.

Of course if two people with neurofibromatosis (or any other autosomal dominant hereditary disease) have children, then all will be affected?

Pause and think.

No. Only *three quarters* of children will be affected

Diagnostic criteria include café-au-lait spots, two or more lesions, axillary or inguinal freckling, optic glioma, iris hamartoma, characteristic bone lesions, and an affected first degree relative.



What is the differential diagnosis?

Orchitis

Symptoms (that can be similar to testicular torsion) include severe pain and tenderness, swelling and haematuria.

Causes of orchitis include Chlamydial infection, gonorrhoea, complications of urinary tract infections, and brucellosis.

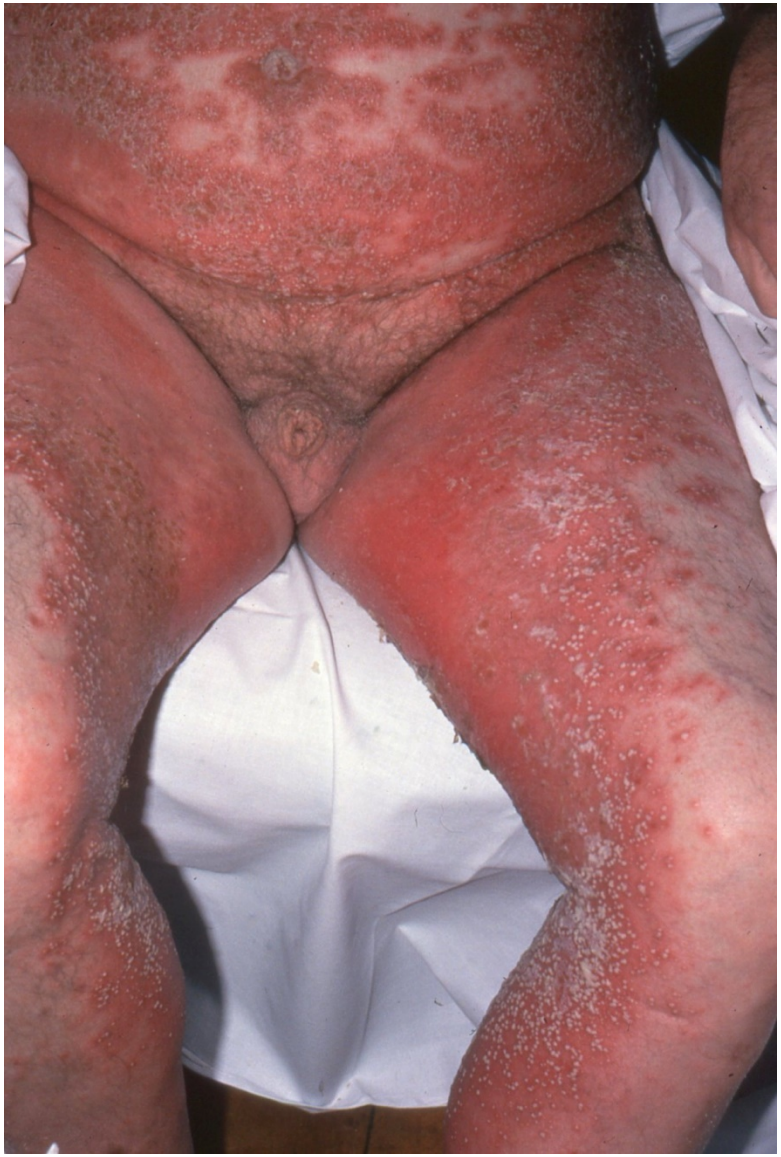
Mumps is also a possible cause, in which case there may well be parotid swelling and a raised serum amylase

Testicular torsion

Suspected torsion is an emergency as irreversible damage to the testicle occurs within a few hours. Onset of pain is sudden and/or severe.

On examination the testis is swollen, tender and usually "high-riding."

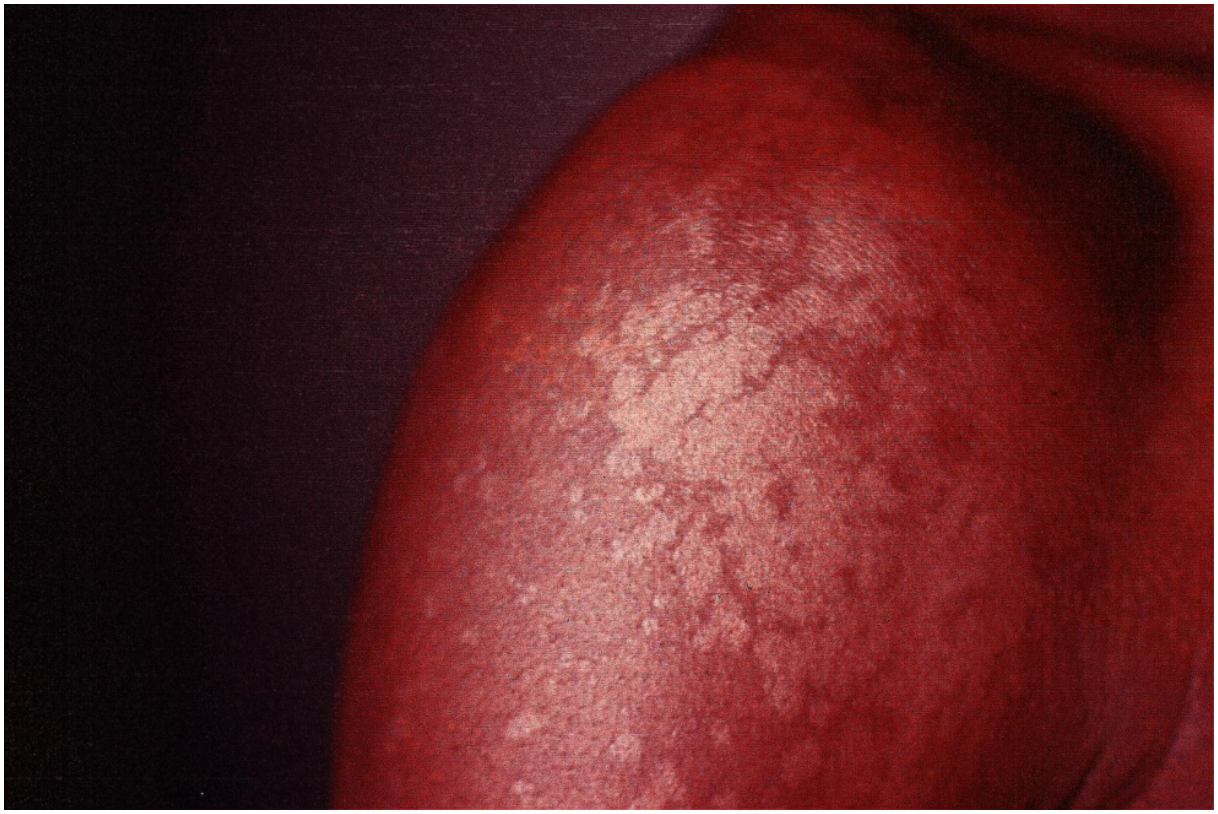
Urgent Doppler ultrasound is indicated which will show lack of blood flow to the testicle in question. If there is any doubt urgent surgical opinion and exploration is indicated



This man had “trivial” psoriasis for many years and, just prior to this skin eruption, had developed a pneumonia. What had happened?

He had developed Erythrodermic psoriasis with guttate and pustular elements.

This is a dermatological emergency and treatment with immunosuppressants should be considered.

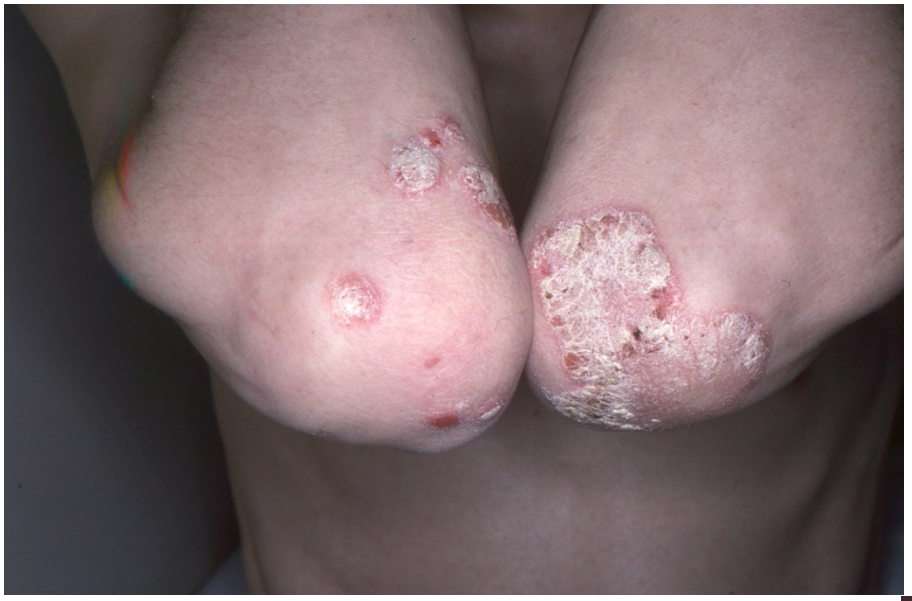


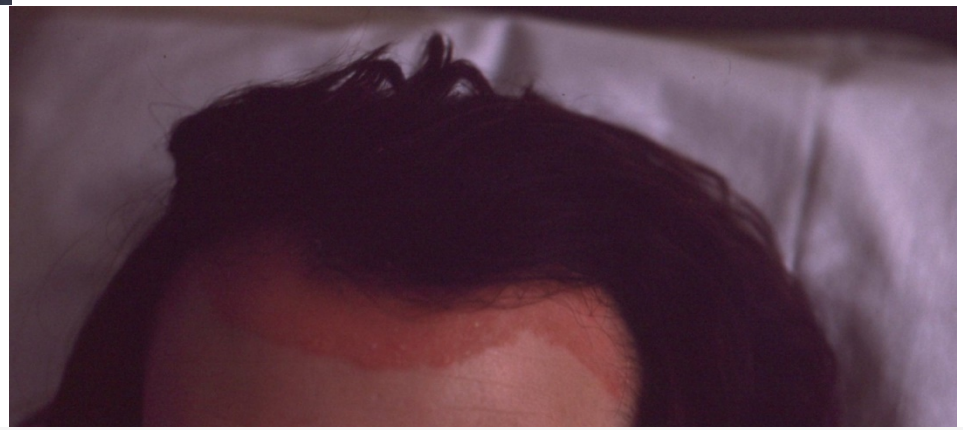
What is this?

This is **Pityriasis versicolor/ Tinea versicolor.**
It is caused by fungal infection of the skin that usually only becomes clinically obvious in warm and humid conditions. It usually causes no symptoms and Is particularly evident in those who have been sunbathing.

The problem is not so much changing of colour, but depigmentation (as in the patient illustrated) or lack of normal pigmentation to tanning.

The raindrop appearance is characteristic.

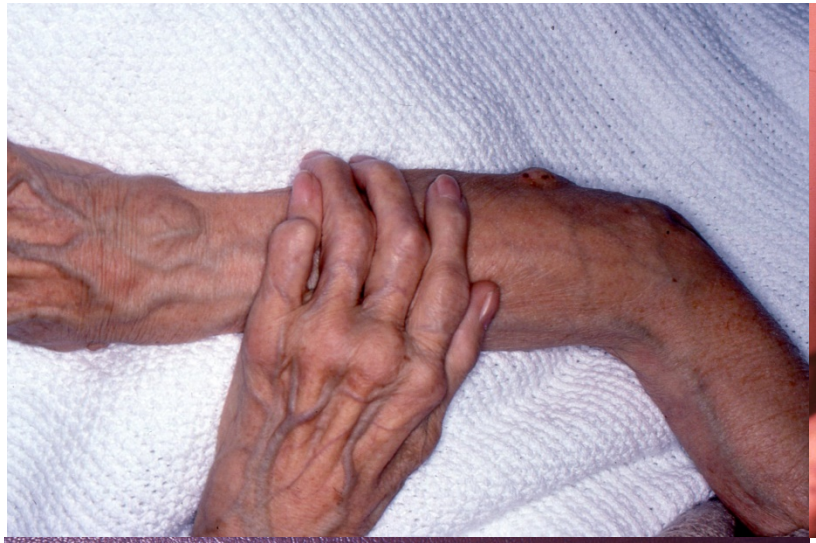


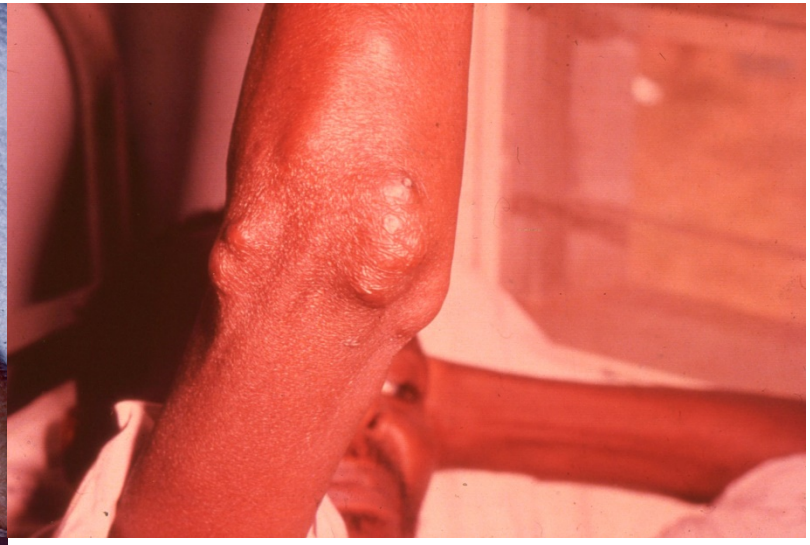


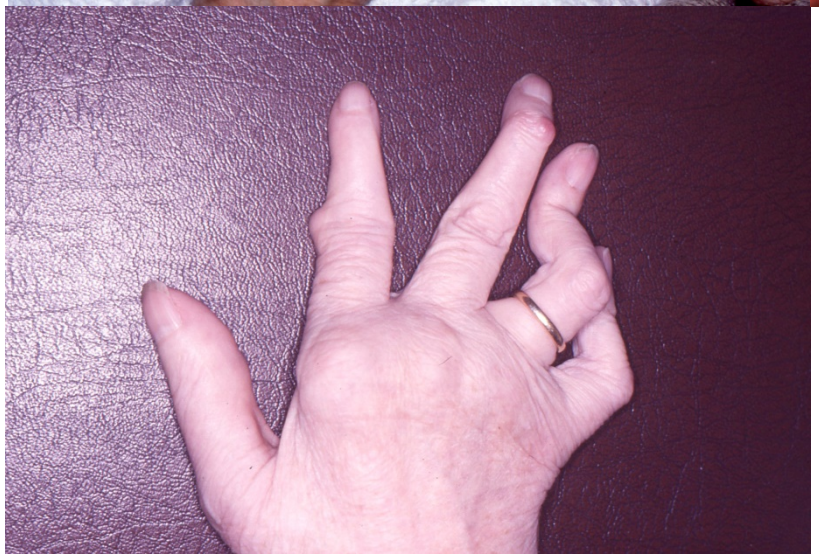
This man had extensive lesions on his elbows and at his hair line.

Is there an underlying infection that might explain why the lesions were so extensive?

This is severe psoraisis. It is well recognized that psoriasis can be much worse in end stage HIV infection.

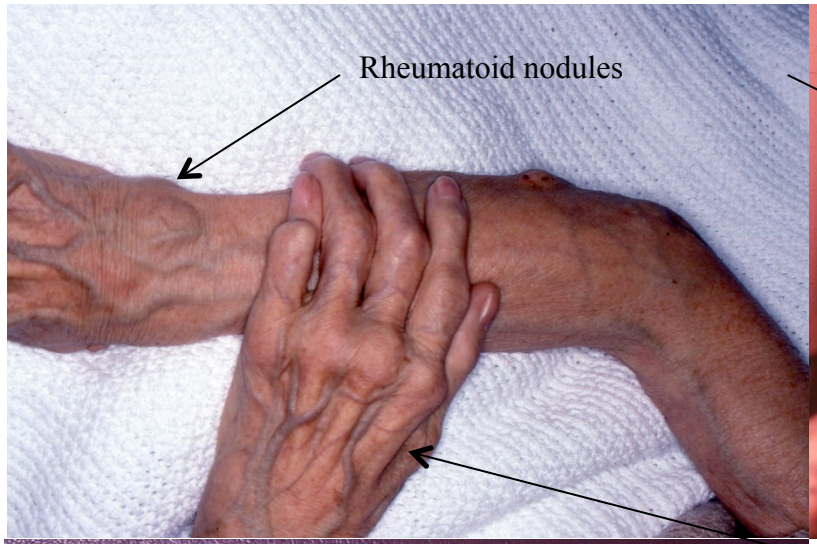


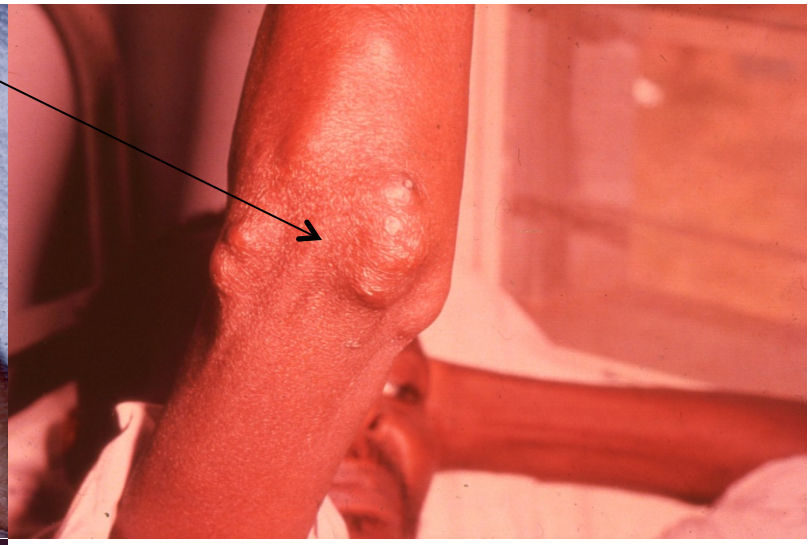


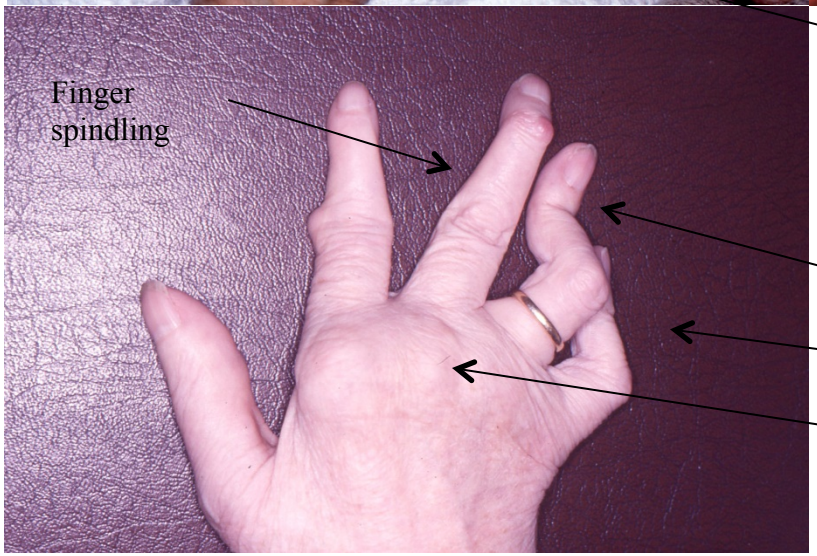


What disease is shown in all three pictures?
Would serological tests be positive?

Rheumatoid nodules usually only occur in seropositive Rheumatoid arthritis







Small muscle wasting

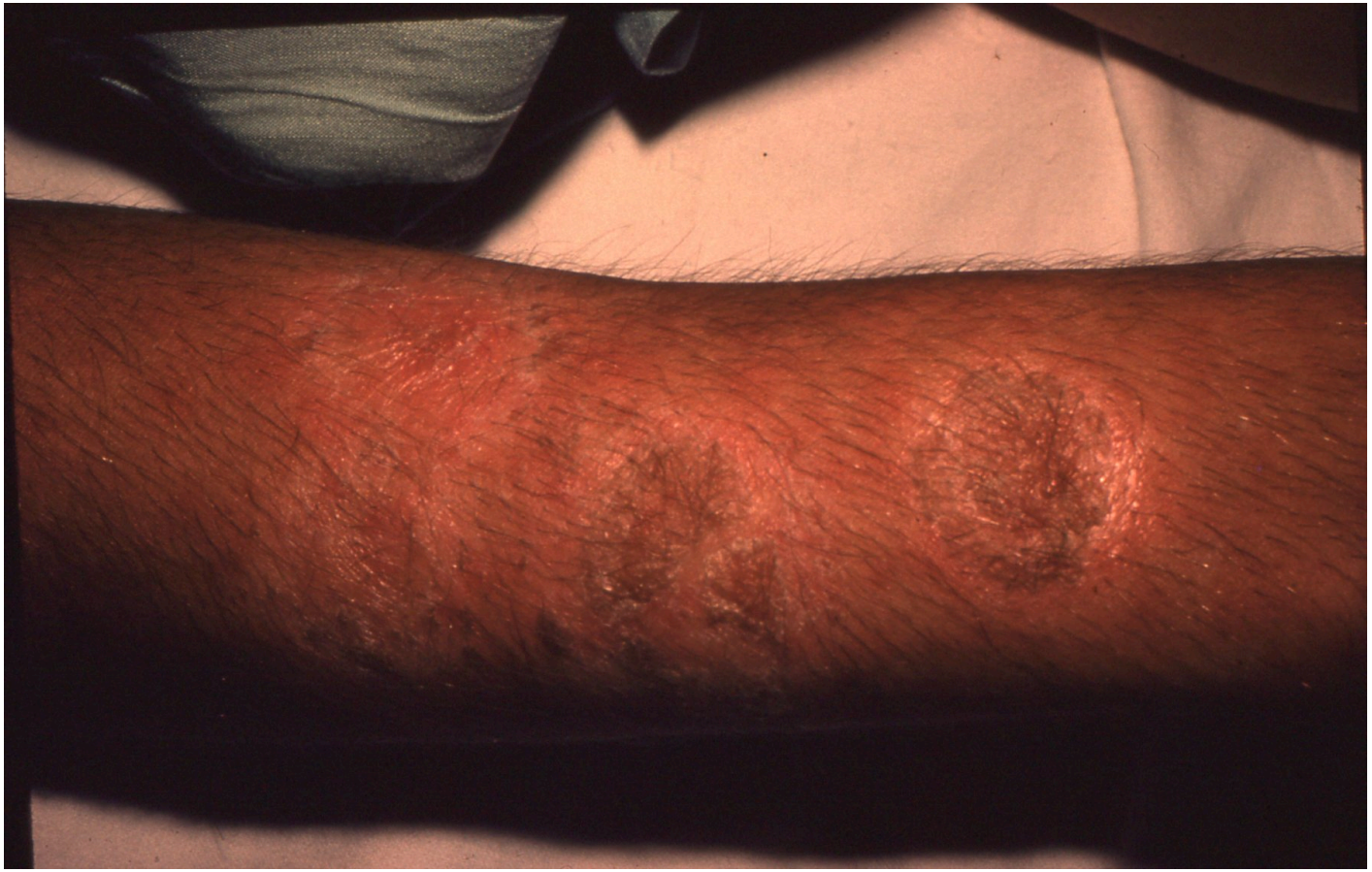
All the pictures show manifestations of rheumatoid arthritis

Boutonnière deformity

Ulnar deviation

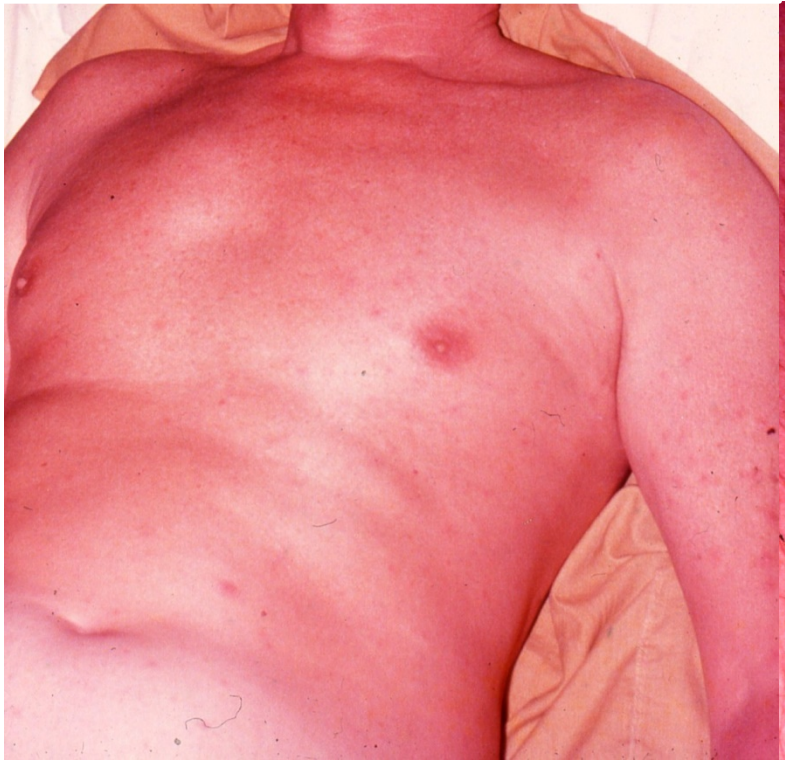
Metacarpophalangeal swelling

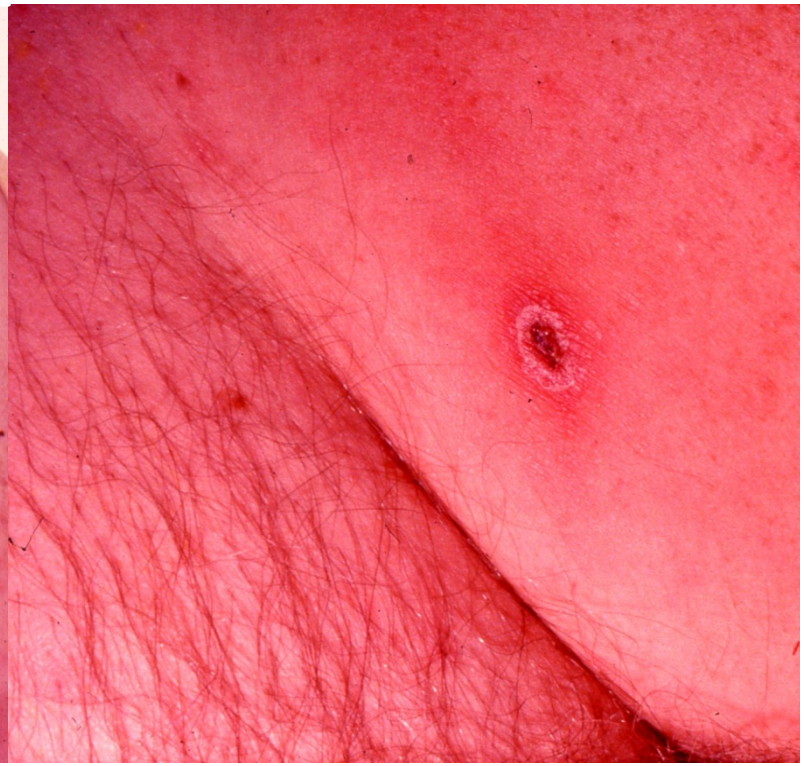
"Z" deformity of thumb and Swan neck appearance of the fingers are not seen



What is this?

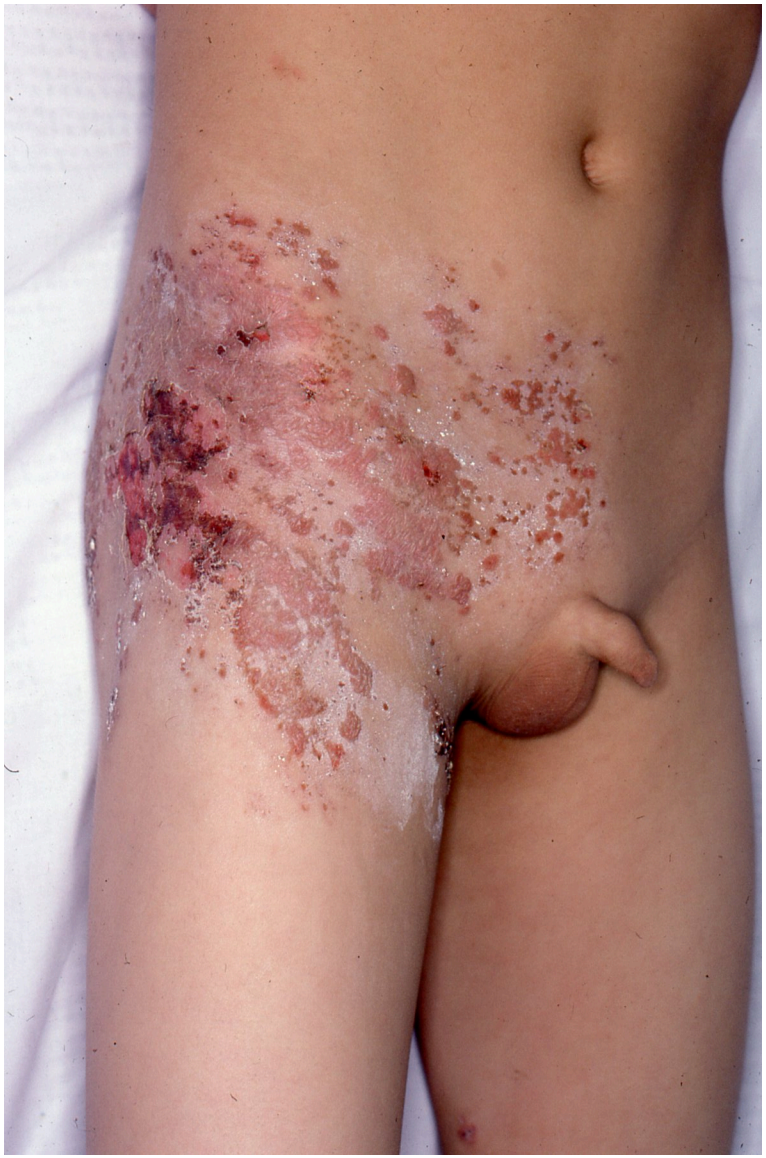
This is ringworm, classically associated with Tinea infection.
There are circular lesions with scaling on the perimeter.





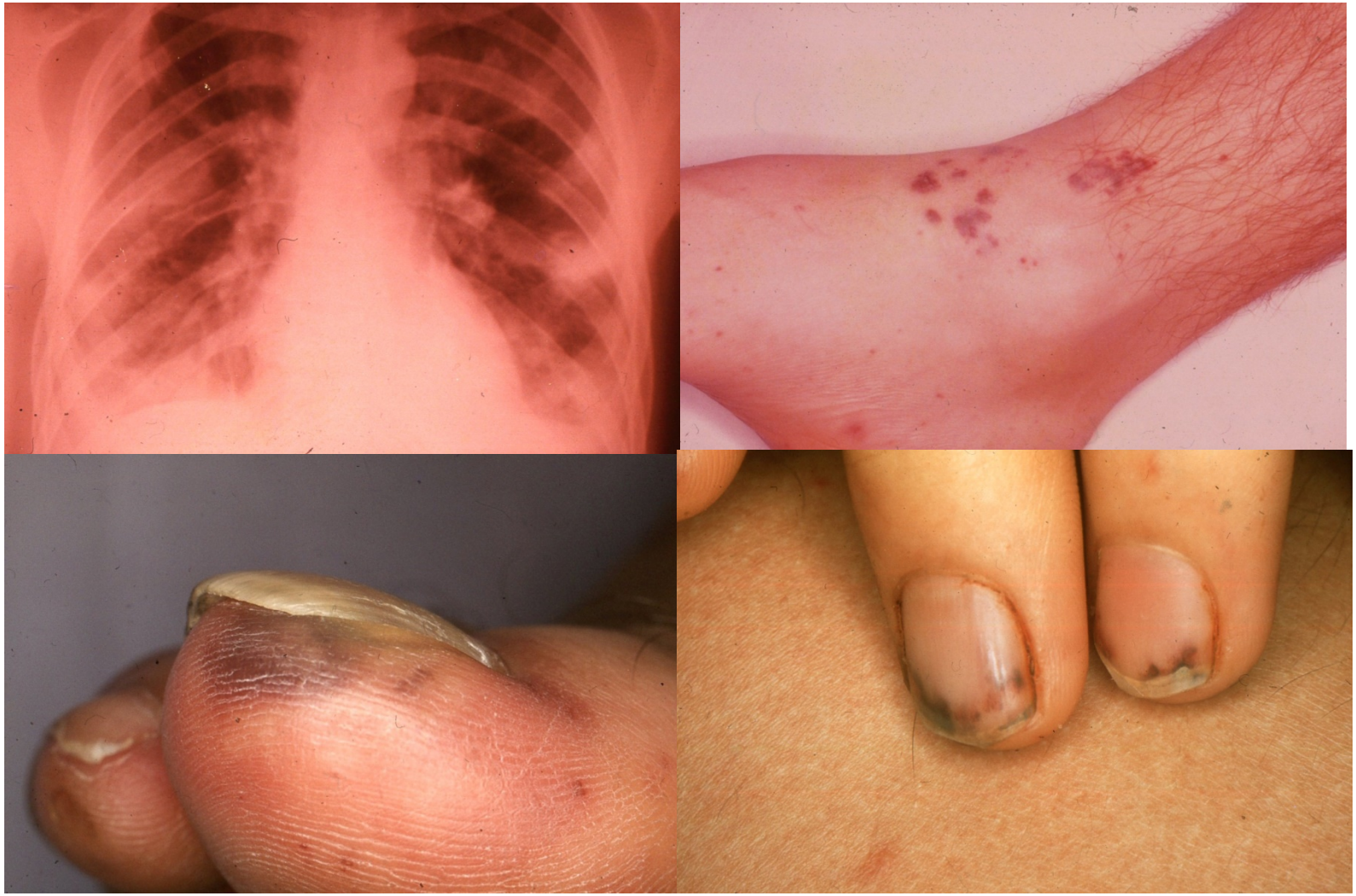
This man had recently visited a South African Game park, and had developed a rash as illustrated and a lesion in his groin. What is the diagnosis?

This is **South African Tick Typhus.** The lesion in the groin is an eschar which, like a chancre, is the site of inoculation of the causative organism. He was feverish but not unwell. Malaria must be excluded in anyone who becomes feverish after visiting a malarial area, even if there is another diagnosis made.



What is this?

Shingles. Shingles is usually found in the elderly but can occur at any age provided that there had been a previous Chickenpox infection. In those of mature years shingles is not usually associated with underlying Immune deficiency syndromes (about one in three of you will get shingles). But in younger ages one should always consider the possibility of underlying problems. Why "about one in three of you" will get shingles – what about me? As a Consultant in Infectious Diseases my immunity must have been boosted by much exposure to chickenpox and shingles, so hopefully I will not share your risk!



Use your imagination and create the story (history and clinical findings) of this patient.

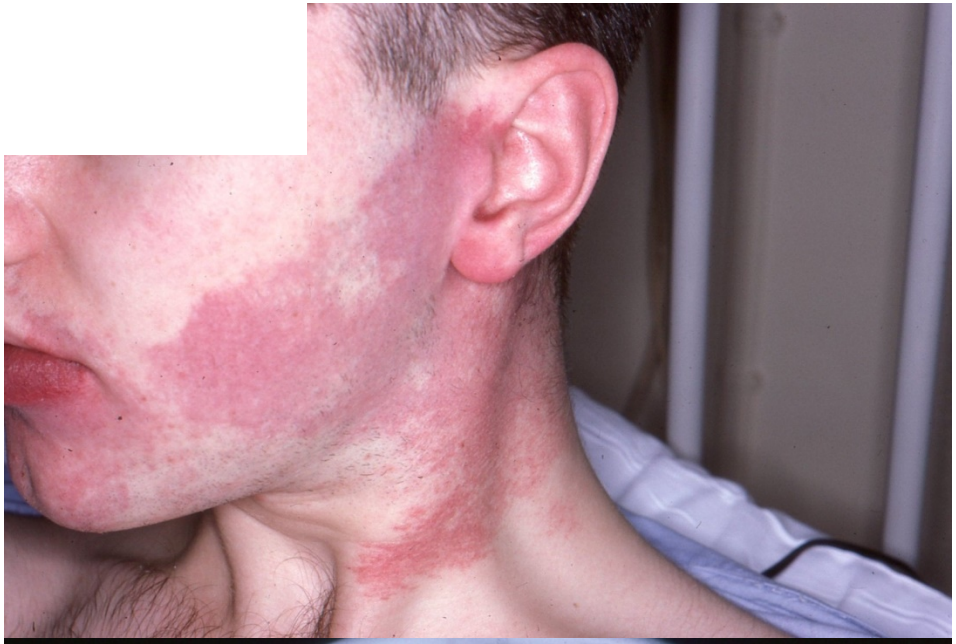
The best and most credible story would be:

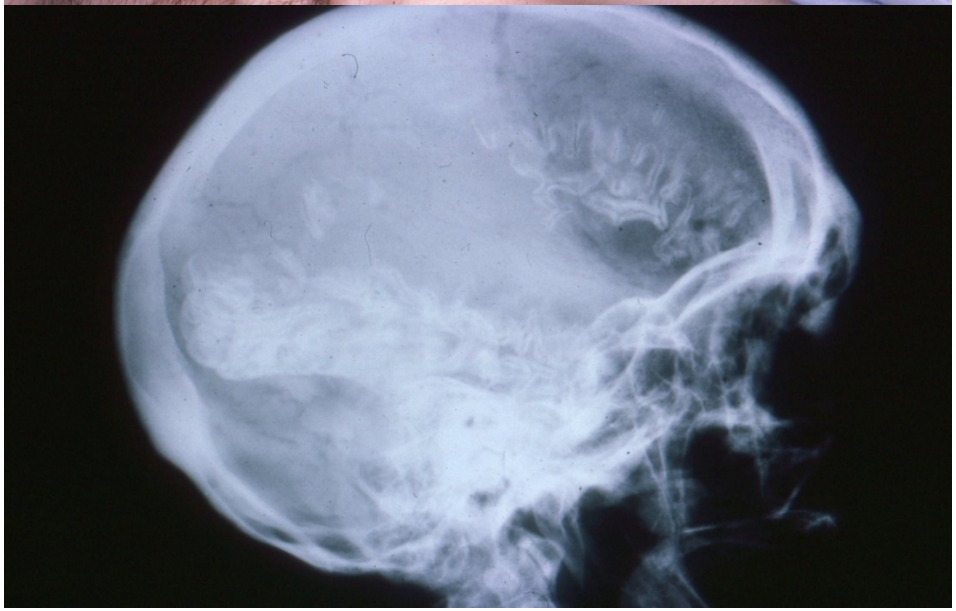
This patient was an intravenous drug abuser who had become abruptly unwell with high fever, rigors, and latterly a raised respiratory rate.

On examination he had a high pulse pressure, a raised jugular venous pressure with large v waves, a systolic murmur at the apex. He also had an aortic diastolic murmur

He has signs of tricuspid incompetence and a chest X-Ray showing much circular shadowing suggesting *right sided* endocarditis. The skin lesions and splinter haemorrhages suggest *left side heart involvement* and the signs are those of aortic incompetence.

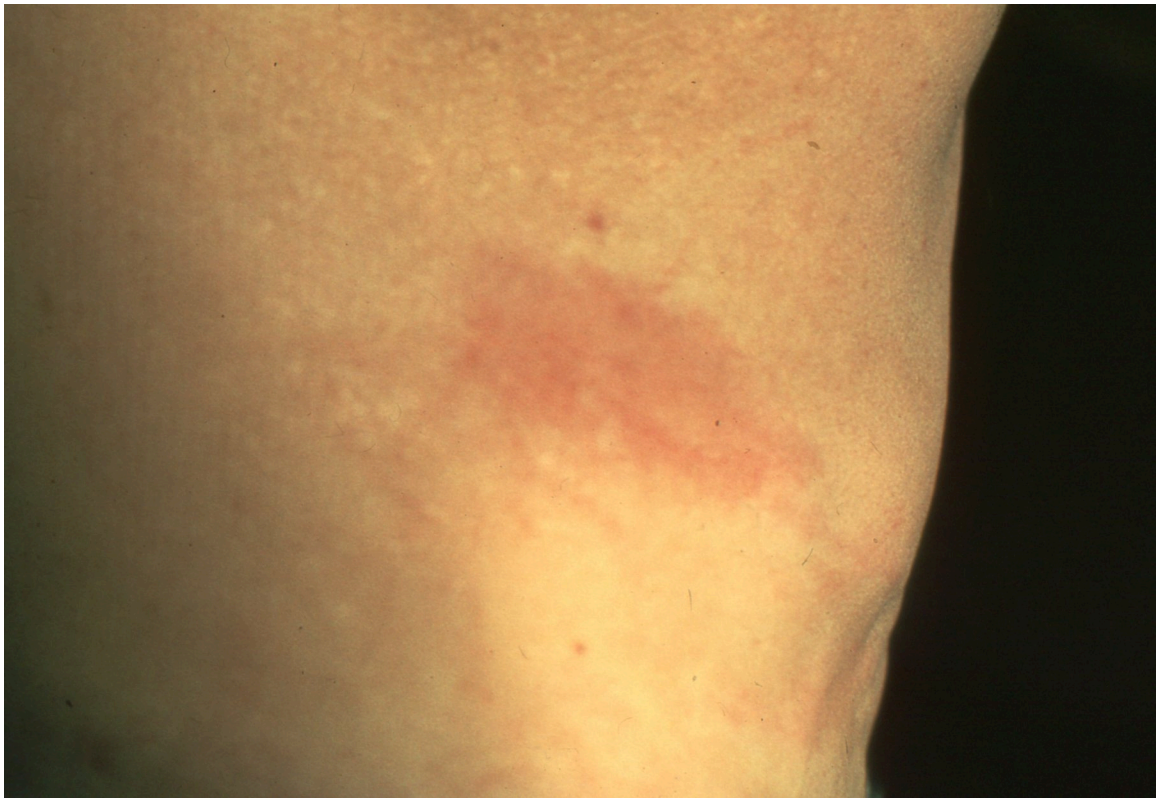
Staphylococcus aureus was isolated and (surprisingly) he survived without heart surgery. A heart surgeon should be involved from the start because
deterioration of aortic valve endocarditis usually means valve rupture,
fulminant left heart failure and death.





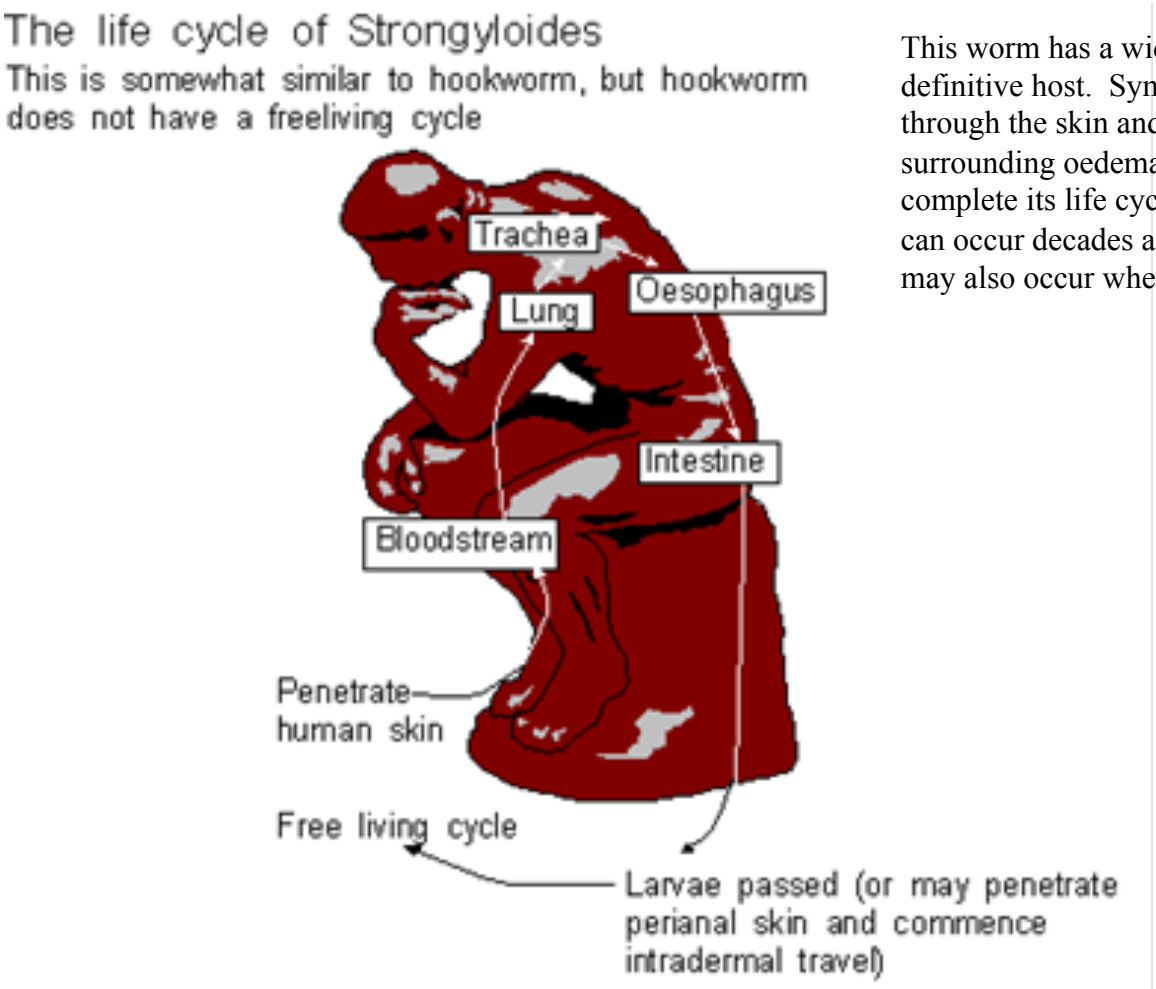
What is this syndrome?

This is a port-wine stain, a abnormality of cutaneous blood vessels. There may be abnormalities of the intracranial blood vessels, sometimes with calcification as in this patient The Sturge-Weber syndrome.

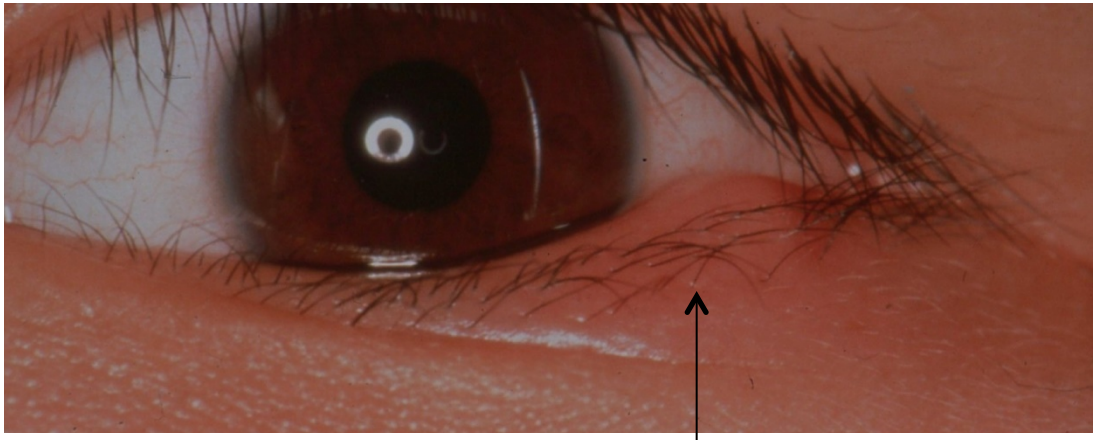


This man had been a Japanese prisoner of war and , 50 years later, presented with transient itchy skin rashes that could occur anywhere on his body. What is the likely diagnosis?

This urticarial rash should raise the possibility of *Strongyloides stercoralis i*nfection



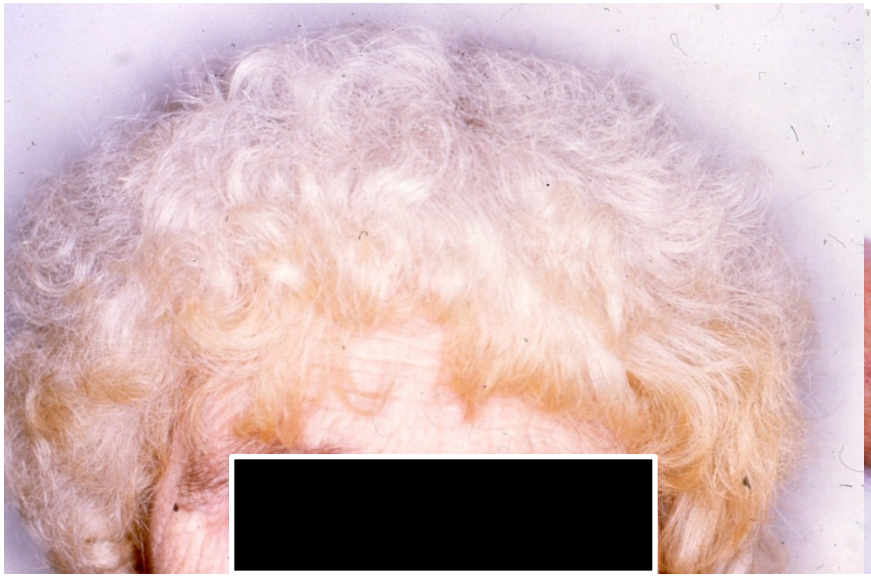
This worm has a wide distribution in tropical areas. Man is the only definitive host. Symptoms occur when the larvae penetrate and travel through the skin and cause a serpiginous, urticarial wheal with surrounding oedema (Cutaneous larva currens). The worm can complete its life cycle repeatedly in the same host and thus symptoms can occur decades after those infected have left the tropics. Symptoms may also occur when the larvae pass through the lungs.

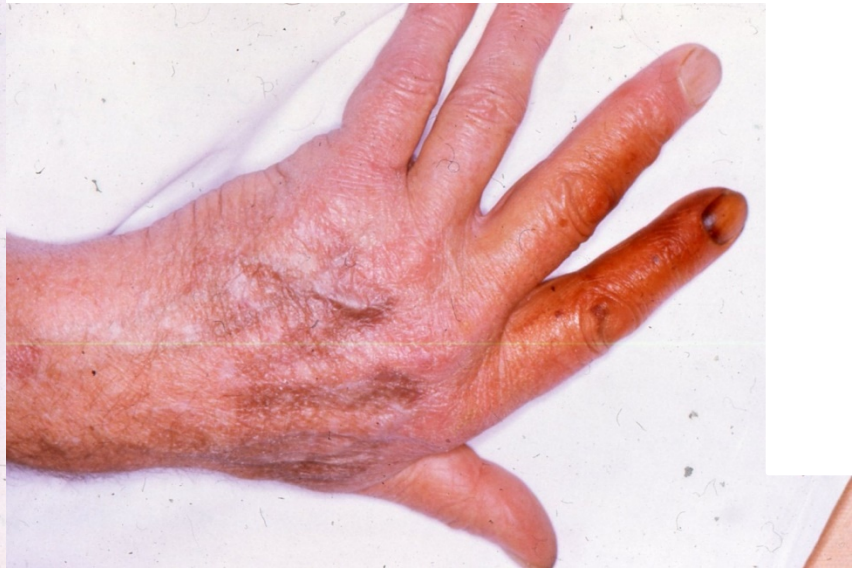


What is this inflammatory swelling?

This is a stye, proper name hordeolum, an infection of sebaceous glands or of sweat glands. External styes form on the outside of the lids and can be seen as small red bumps. Internal styes occur inside the eyelids.

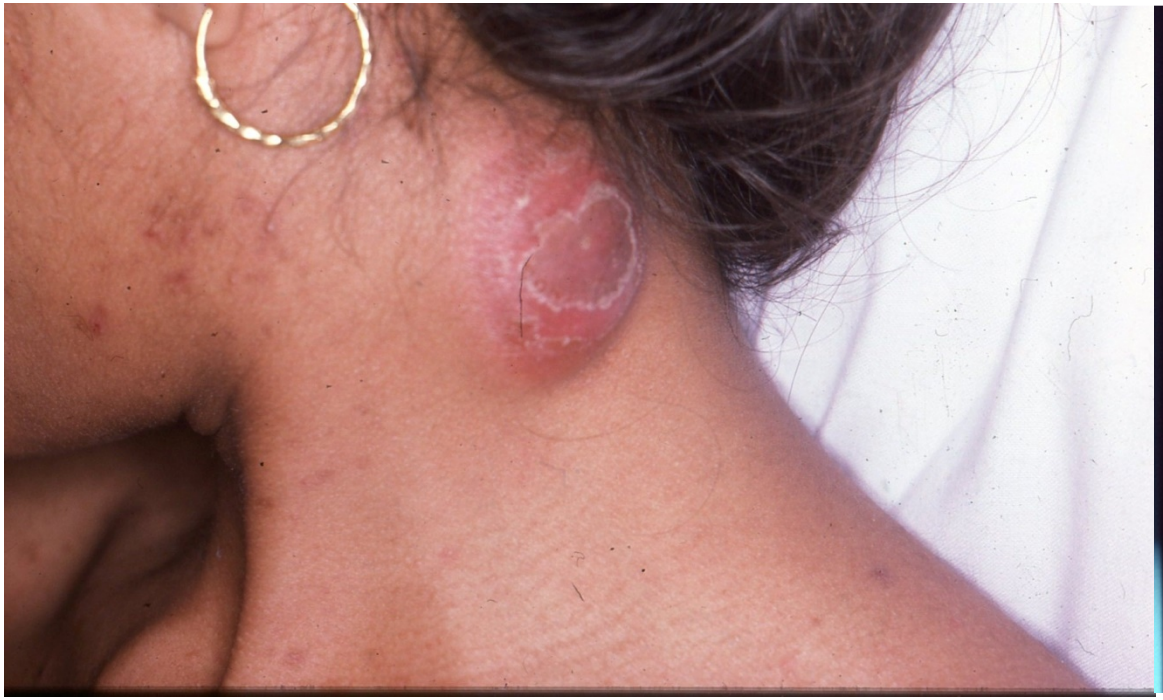
Styes are harmless in most cases and complications are very rare. They do not cause intraocular damage and normally heal spontaneously with rupture within a few days to a week. The initial treatment is application of warm compresses. Incision and drainage is performed if resolution does not begin in the 48 hours after warm compresses are started. Topical antibiotics can be used.

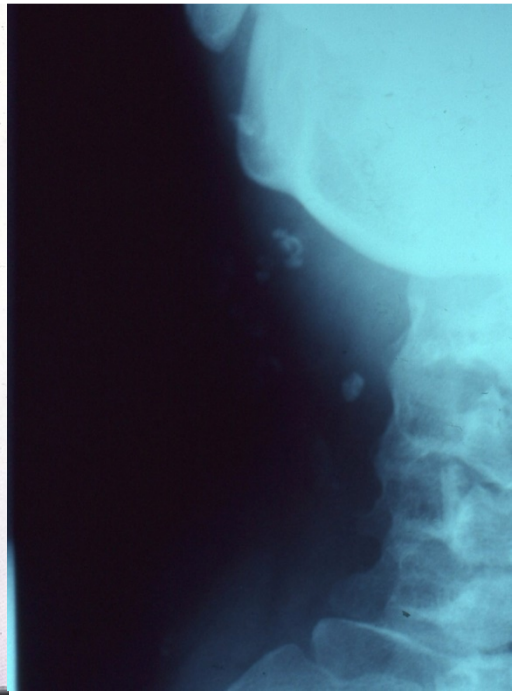




What can you see?

This lady has tar staining of her hair and of her hand. She does **not** have nicotine staining – *nicotine is colourless*

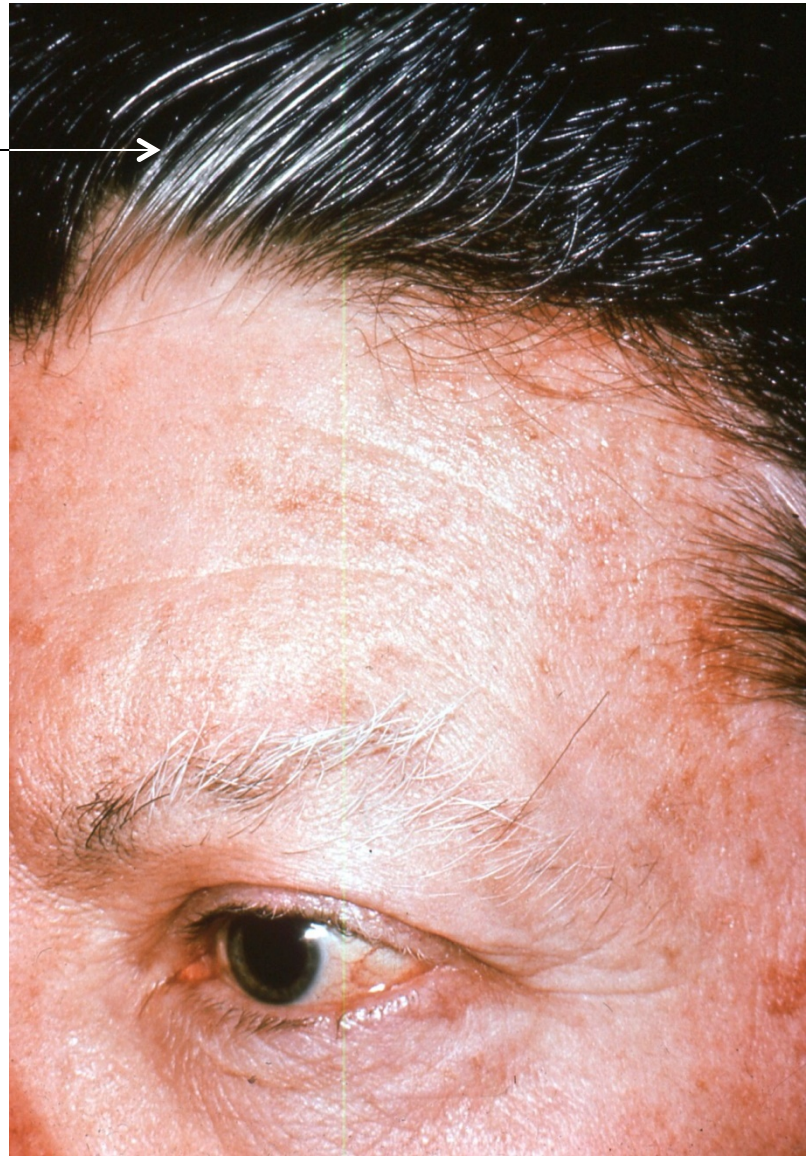




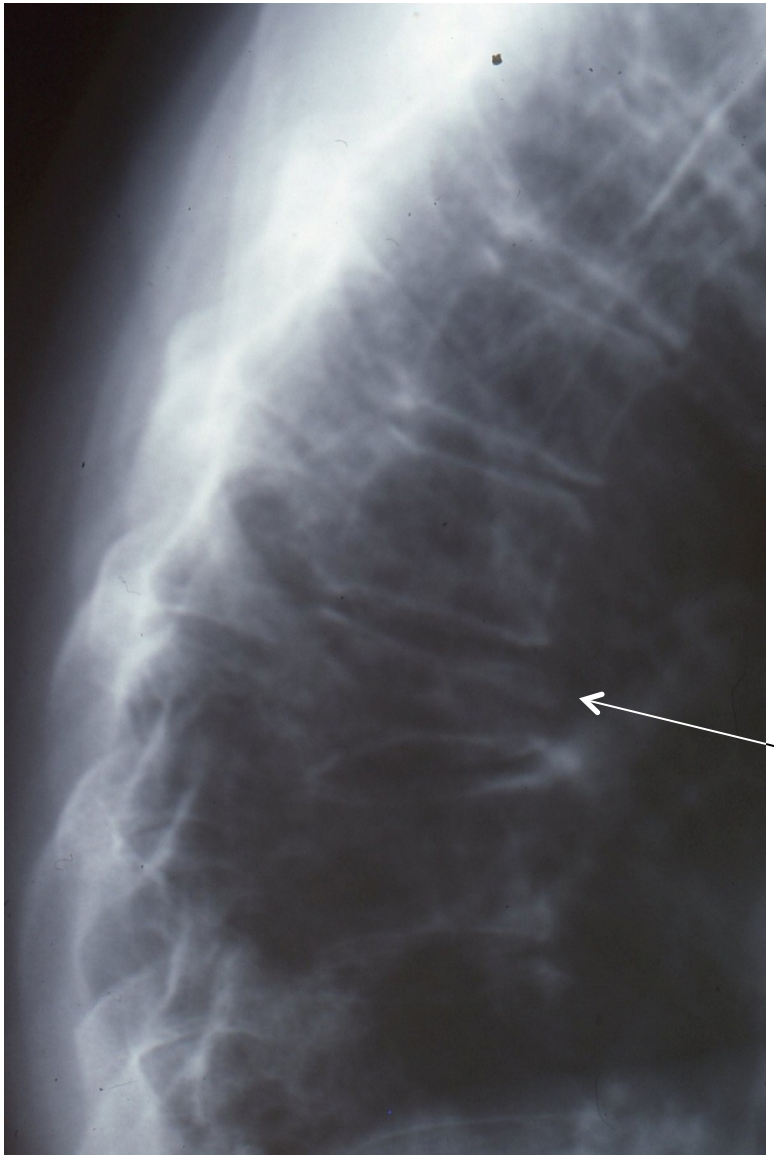
This lady had a slowly enlarging lesion in her neck that had not responded to routine antibiotics – whatever is meant by this.
For reasons not altogether clear an X-ray was performed that suggested a diagnosis that was confirmed on microscopy and culture.
What was this diagnosis?

The areas of calcification would be unusual in most “standard” bacterial infections and would suggest tuberculosis.

Whose sign is this?
Are there any implications?

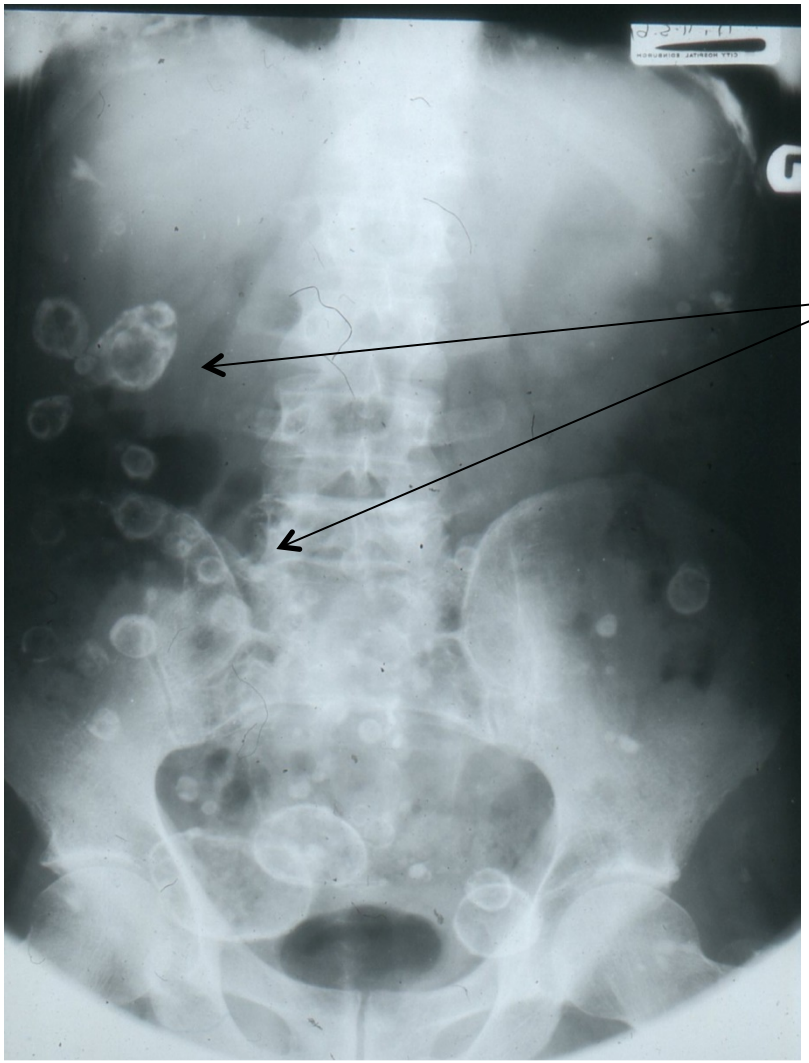


This man had Waardenberg's syndrome, a group of genetic conditions that can cause changes in hair pigmentation and may be associated with congenital hearing loss. Sometimes the pupils are of different colour.



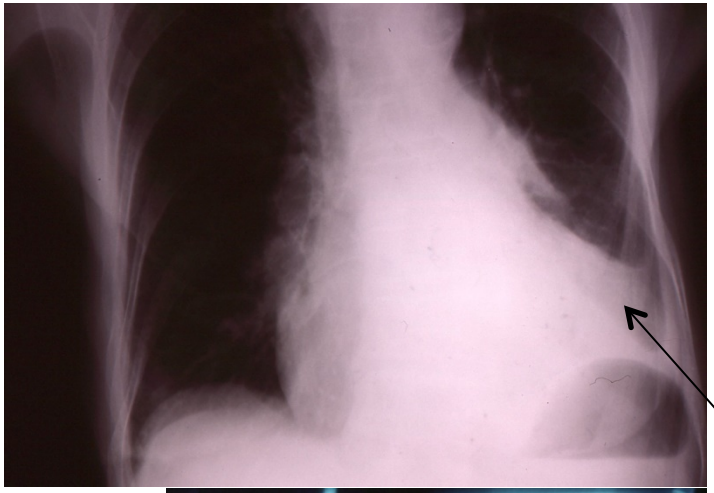
What is this and what is the most likely underlying cause in a patient of 70 years?

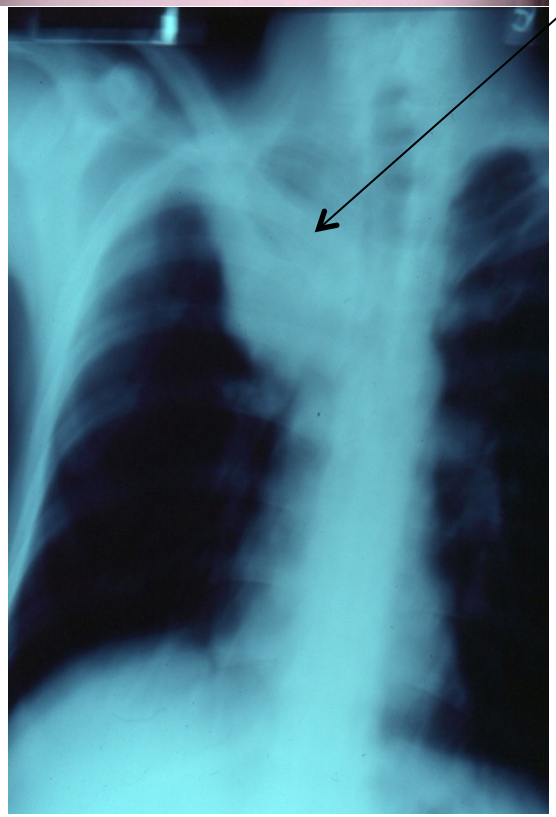
This is typical of a crush fracture. These may occur in disorders such as myeloma and with malignant deposits but the most likely cause would be osteoporosis.



This patient had spent a lot of time abroad and had always had a dog. What is shown?

These are cysts with calcified walls – the calcification is only in the walls. If calcification were solid the whole sphere would be white. The appearances are very suggestive of Hydatid disease. Tuberculous lymphadenitis would produce solid spheres of calcification.





These two X-rays show the same descriptive appearance at different sites. What is the shared descriptive appearance?

The upper X-ray shows left lower lobe collapse and the lower X-ray shows right upper lobe collapse. Both patients had underlying lung cancer.