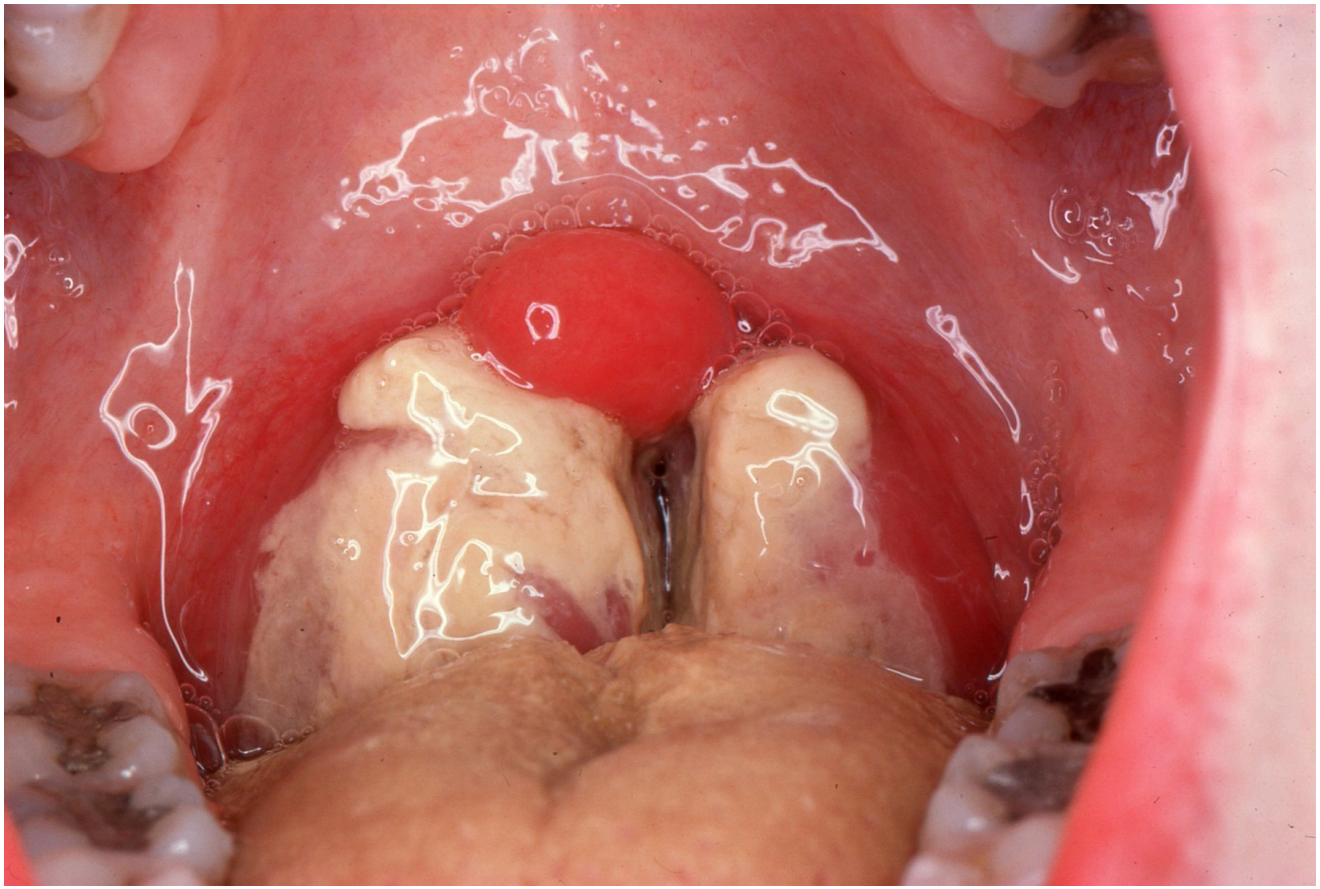
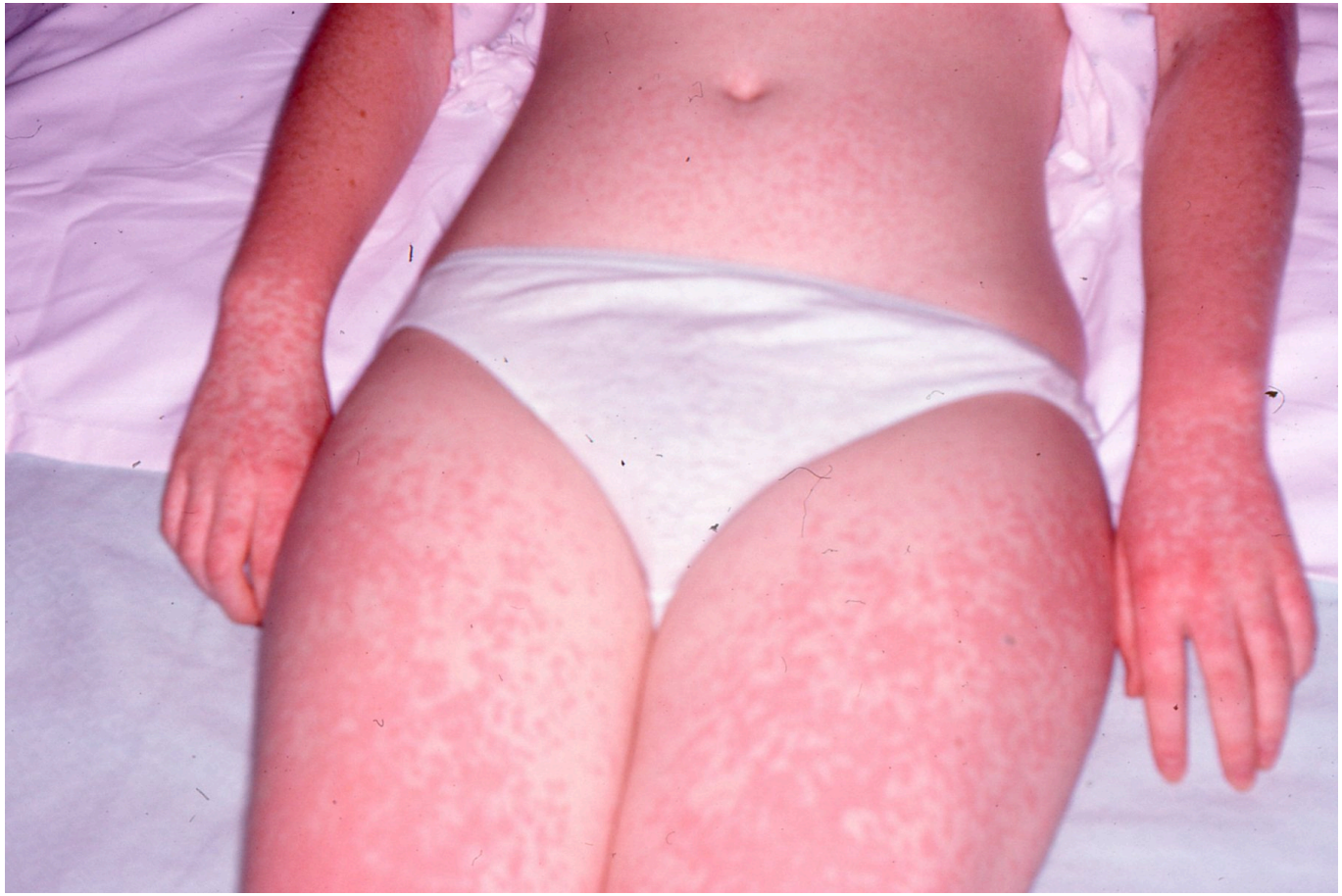


This man had a sore throat. What was the cause?

This is the “ultimate classical” appearance of Glandular fever. There is a sheet of white exudate which does not spread outwith the area of the tonsils. With these appearances the spleen would almost certainly be palpable.

A Streptococcal sore throat would have numerous small yellowish areas (of pus) against a generally red background. Neither Streptococcal sore throats nor diphtheria is associated with splenomegaly. Diphtheria would show a discoloured membrane which would spread outwith the area of the tonsils.



This woman (not the same patient as the previous picture) had Glandular fever. Why the rash?

This could be a rash that may occur with glandular fever. It is far more likely to be the rash that almost everyone who has been given ampicillin or ampicillin-like penicillins gets when they have glandular fever. It is diagnostically useful occurrence, *although it betrays hopeless prescribing for a sore throat.* If you are going to give an antibiotic for a sore throat (the vast majority are viral and even therapy for a streptococcal sore throat hardly shortens symptoms) then simple penicillin is adequate. The ampicillin rash in glandular fever is a transient event and does not imply a permanent allergy to ampicillin or penicillins – although doctors who prescribe ampicillin for sore throats are likely to compound their error by denying the patients the benefits of ampicillin thereafter by telling the patient that they are allergic to penicillin and should not receive it in future..

This man presented with a urethral discharge. What is best management?

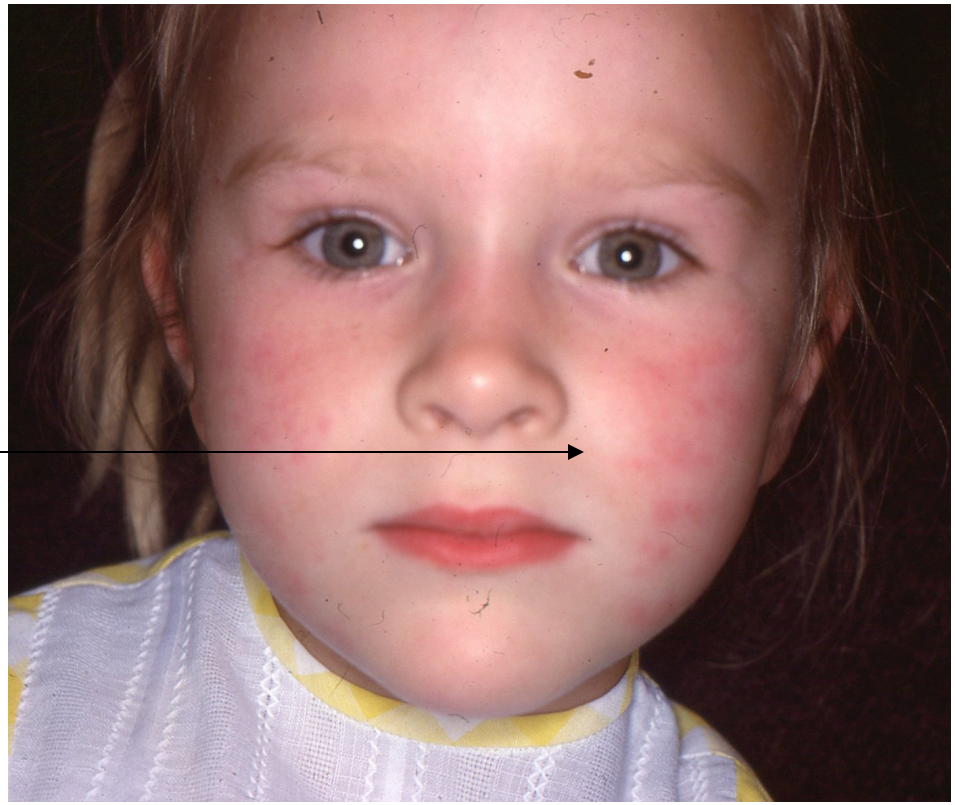
What is the minimum number of other people that need treatment?

This almost certainly would be gonorrhoea. Sexually transmitted diseases are best managed at STD clinics because they have the facilities immediately available to perform the required investigations to confirm gonorrhoea and exclude other coincidental pathogens including Chlamydia, trichomonas, HIV, and hepatitis B. Contract tracing might be indicated.

The conventional wisdom answer is that “the partner should also be treated.” However with most STDs a little thought suggests that (at least) **three** other people need treatment. His regular partner and whoever introduced the infection to them (in other words if two people only ever have had sex with each other then they cannot get a STD from sexual contact). Correct? *Almost.* It is possible for members of such a couple to acquire genital herpes without a third party – presumably by orogenital contact when one partner is (symptomatically or asymptomatically excreting *Herpes simplex* virus in their saliva.

This young lady had been sent home from school with “mild scarlet fever.”

What is this? A clue. You can almost see the finger marks.



This is the Slapped cheek syndrome, erythema infectiousum. It is caused by a parvovirus infection. The facial rash last for about a week and, in the following few weeks, may return if the patient goes out in the wind. In children it is a trivial infection but foetuses may be damaged and those with vulnerable bone marrows may develop aplastic crises.

Each of these patients had become very unwell with a facial rash, a strawberry tongue, and tests revealed a high ESR. During recovery nailfold peeling occurred.

What is the diagnosis?

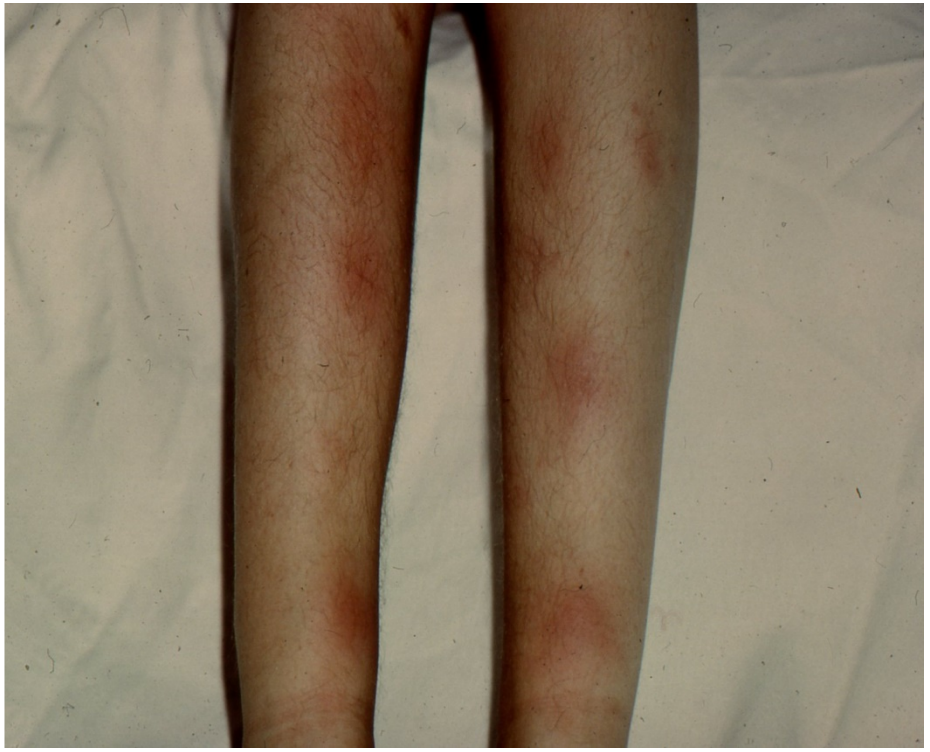
And what other (incidental) abnormality does the first child have?

This is Kawasaki's syndrome. It is a disease, mostly of children, of uncertain aetiology, which was first described in Japan but which has now spread to be worldwide. Its spread suggests either an uncommon reaction to a common infection, or a common reaction to an uncommon infection. It is a serious disorder and coronary artery aneurysms and other vasculitic manifestations may develop.

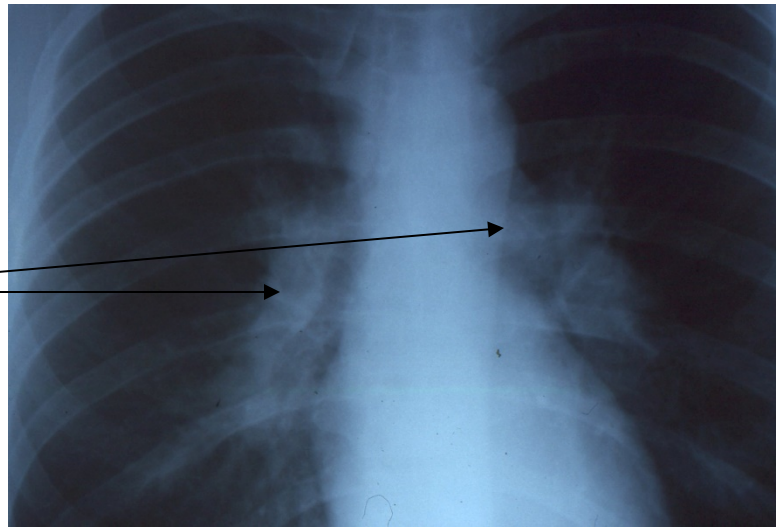
The first child, if you look carefully, has five fingers and a thumb.

What is this?

And what are its common causes?



This is erythema nodosum. Common causes include sarcoidosis, tuberculosis, and streptococcocal infection (the list of possible causes is extensive. In this patient a chest X-ray showed no evidence of tuberculosis but showed the classical appearance of acute sarcoidosis, with bilateral hilar lymphadenopathy.



Acute sarcoidosis is a self-limiting illness, whereas chronic sarcoidosis is a very serious illness.

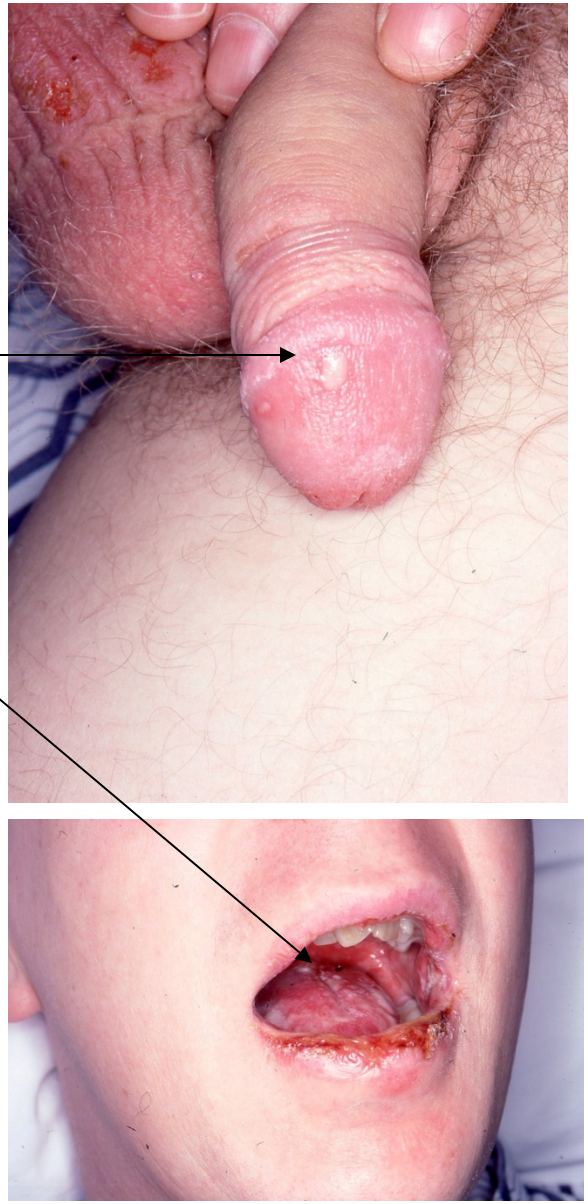
This patient had been on military service in Baghdad and had this lesions for several weeks.

What is it?

This is Baghdad button, one of the many alternative names for cutaneous leishmaniasis, an infection caused by a protozoal infection conferred by the bite of a sand fly.

This man had recurrent ulcers in his mouth and on his genitals.

What is the diagnosis?



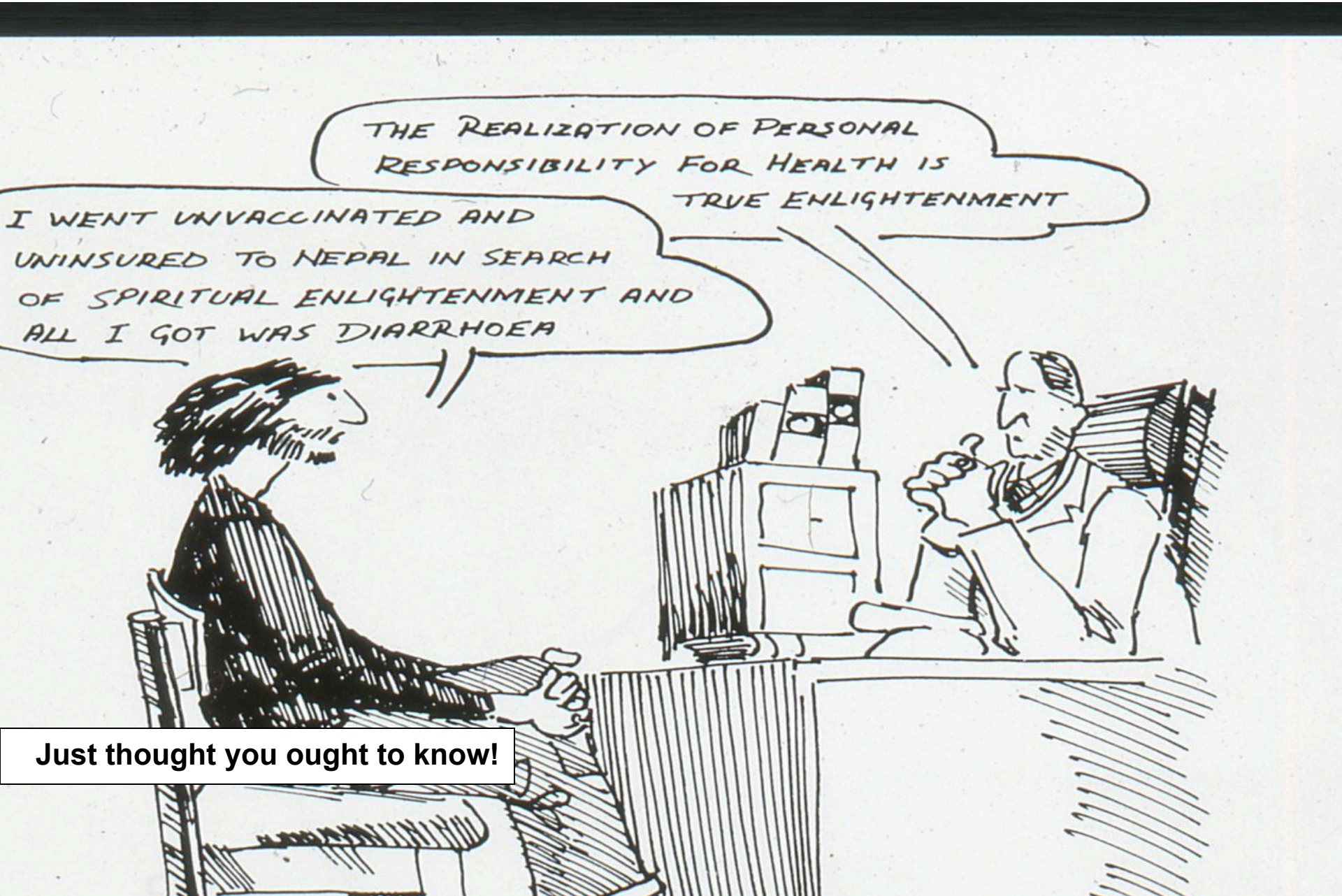
This is Behcet's disease.

Patients may have associated arteritis.

The cause of Behcet's syndrome is not known. It is more common and severe in patients from the Eastern Mediterranean and Asia. Genetic and environmental factors are suspected to be causative factors. It does not appear to be contagious.

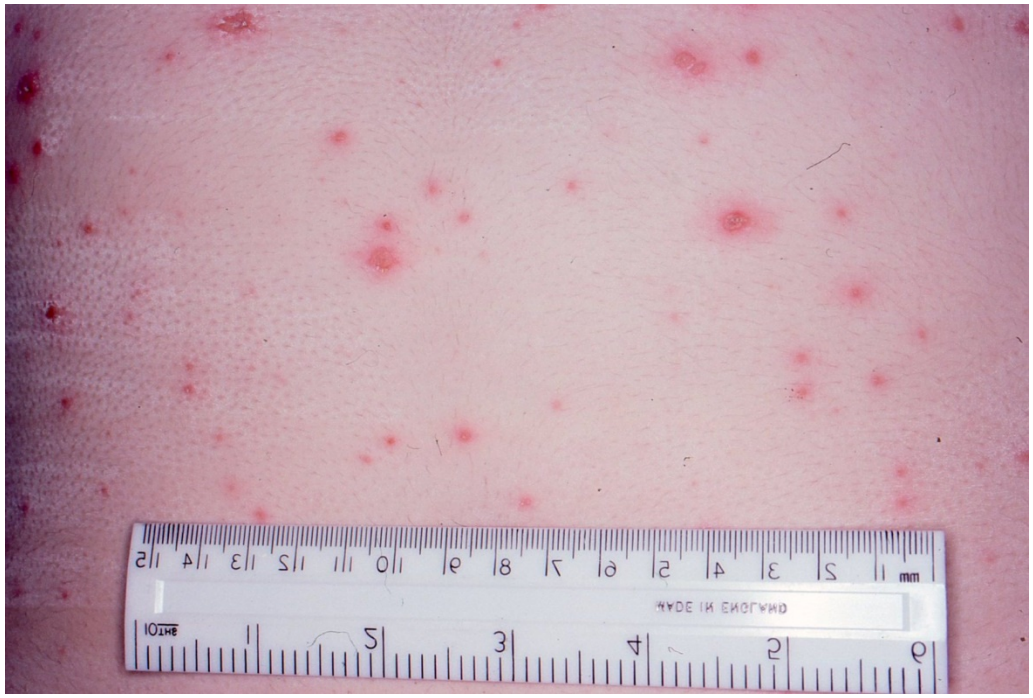
What is this?

This is Dupytren’s contracture. Its main associations are use of vibrating machine tools, liver disease, or idiopathic epilepsy.


THE REALIZATION OF PERSONAL RESPONSIBILITY FOR HEALTH IS TRUE ENLIGHTENMENT
I WENT UNVACCINATED AND UNINSURED TO NEPAL IN SEARCH OF SPIRITUAL ENLIGHTENMENT AND ALL I GOT WAS DIARRHOEA
Just thought you ought to know!

This young child had developed an itchy rash with vague fever.

What is the diagnosis?



This is chickenpox. There are small pustules at varying stages of evolution. Patients remain infectious until the last lesion has crusted.

The origin of the term “chickenpox” is uncertain. Some say it reflects the appearance of chickenfeed scattered as food, whereas others say it is “chicken” (ie. weak) compared to the more serious smallpox.

As a matter of interest the “greater pox” was not smallpox, but syphilis – hence the historical term of abuse “A pox on you, Sir” to which one historical reply was “That will depend on whether I embrace your principles or your mistress!”

What cranial nerve lesion causes the tongue to deviate to the left?

A left hypoglossal (XII) nerve lesion will cause the tongue to deviate to the left, because the right sided tongue muscles push out and push the weak left tongue to the left. That is the conventional wisdom but is it true? – muscles can only contract, they **cannot** push!

The reason that the right sided tongue muscle can push is that, within the tongue they are surrounded by a fibrous tube and the muscles have vertical and horizontal fibres and thus the right tongue is squeezed out as if it were a tube of toothpaste internally squeezing itself out and thereby pushing over the left tongue.

Is it an upper or lower XII nerve lesion? It is likely to be upper as there is no wasting. Upper motor lesions cause muscle stiffness and thus atrophy is less likely: there may be stiffness on rapid repeated protrusions and the tongue may be hypercontractile (hyperreflexic) if gently percussed. In contrast a lower motor neurone lesion will show a weak and wasted side of the tongue which may show fasciculation.

This is more likely to be a nappy rash “ammoniacal” nappy rash or represent candida infection?

This is more likely to represent candida (possibly complicating an ammoniacal nappy rash) because the redness extends deep into the natal cleft. Ammoniacal nappy rash tend to spare the natal cleft.

This lady was referred to an infectious diseases unit with a three month history of diarrhoea. What disease do the perianal appearances suggest? Why was an infectious disease unlikely?

These are appearances suggestive of Crohn's disease. There are fleshy skin tags, evidence of fistula formation, with the possibility of ischiorectal abscess formation.

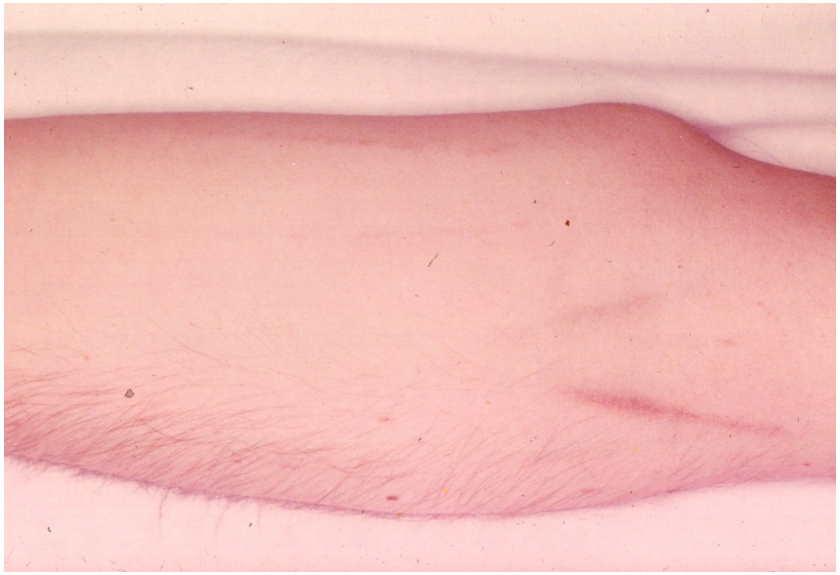
Most infectious diseases causing diarrhoea are self-limiting and would not last for three months. The infectious diseases that might persist for this long would be giardiasis or amoebiasis.

This is what?

Severe dehydration. This patient had profuse small bowel type diarrhoea with frequent passage of large volume watery stool (the other form of small bowel diarrhoea is malabsorptive with bulky, frothy, malodorous, whitish stool that floats and is difficult to flush down the lavatory pain.

What had this young man had been doing?

And what would be the major infections he might acquire?

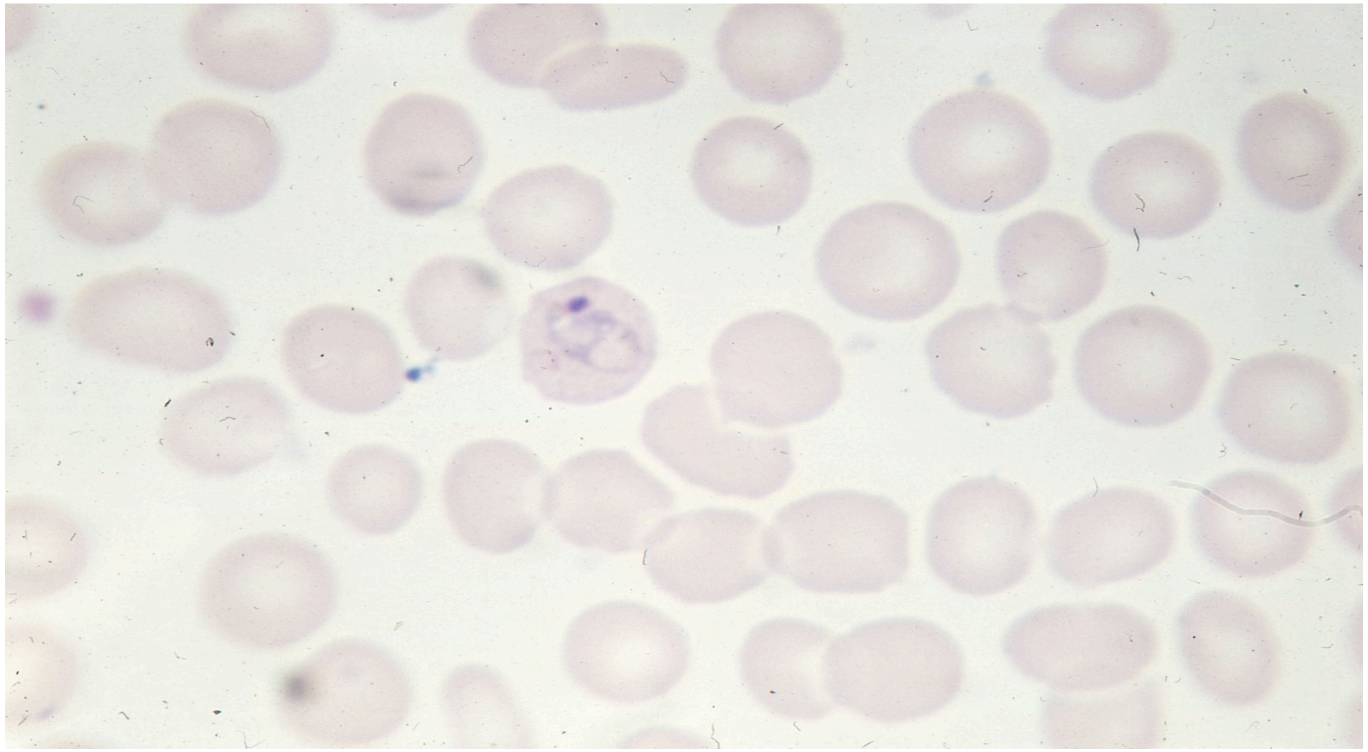


Injecting drugs intravenously – these are typical drug track marks caused by injection of caustic substances (temazepam was one such commonly used drug) or drug that have been diluted “cut” with noxious substances (in order to make more profit for the drug pusher).

The infections he might acquire include Staphylococcal septicaemia (possibly with endocarditis), hepatitis B, hepatitis C, and HIV. Syphilis and tetanus have also been recorded.

What are these lines across the nails? And what is their significance?

These are Beau's lines and represent a period of greatly reduced nail growth usually caused by a severe illness. This patient had had a generalised exfoliative dermatitis as a drug reaction. When would this have been? About three months previously – a fingernail takes six months to grow from base to tip and the Beau's lines are about half way up the nail. Several weeks after the exfoliative dermatitis the patient's hair had also dropped out, because of the greatly reduced hair growth leading to hair friability,



What does this blood film show?

The ring form of (vivax) malaria. Importantly a routine blood film will not reveal parasites (a special stain is required). If the red corpuscle parasitisation rate is above five percent then falciparum malaria is likely (vivax, ovale and malariae malarias do not usually attain such a parasitisation rate) but be aware that mixed infections may occur.

What is this?
And what is the treatment?

This is localised bacterial infection – you can see the site of entry which was related to local trauma. Erysipelas (a superficial skin infection) has sharply defined borders whereas cellulitis (a deeper infection) has less distinct borders. Erysipelas is caused by Group A Streptococci for which penicillin would be appropriate, whereas cellulitis may have other bacteria including *Staph. aureus* as a cause for which flucloxacillin would be appropriate. Most protocols hedge their bets for treatment and advise that both are treated with penicillin and flucloxacillin.

What (three) abnormalities can you see?

This patient has ascites (note the typical “filled in” umbilicus), Dupytren’s contracture, and gross clubbing. The last two take time to develop so he obviously has a chronic process, almost certainly cirrhosis with portal hypertension and hypoalbuminaemia contributing to the ascites.

This man had developed generalised hyperpigmentation which was particularly marked in the axillae and groin and he had developed small papules.

What is the condition and what does it usually signify?

This is acanthosis nigricans which is usually a marker for an underlying malignancy – this patient had a lung cancer.

This child had become unwell with fever and the GP had noted this “trivial” rash which did not blanch on pressure.

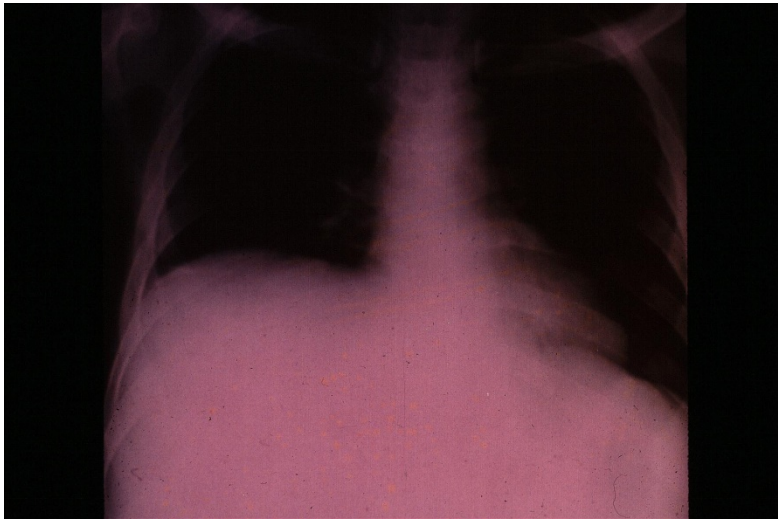
What did the GP do?

This rash is typical of meningococcal septicaemia. The GP gave IV penicillin and arranged immediate admission to hospital. He also informed the relevant public health doctor who arranged for relevant contacts to be given antibiotic prophylaxis. Interestingly penicillin, although it can be used to treat invasive meningococcal infection, does not eradicate meningococci from uninflamed throat secretions, and so is **not** used for prophylaxis.

Most hospital protocols recommend that ceftriaxone (or similar cephalosporine such as cefotaxime) are used for treatment in hospital.

The patient's parents had not noted the "trivial" rash. This illustrates the need for all febrile children to be examined carefully.

This is a more extensive meningococcal rash



This patient had returned from a tour of duty in rural Africa and presented with fever and vague upper abdominal pain. What does the X-ray show and what is the connection with the fluid on the right?

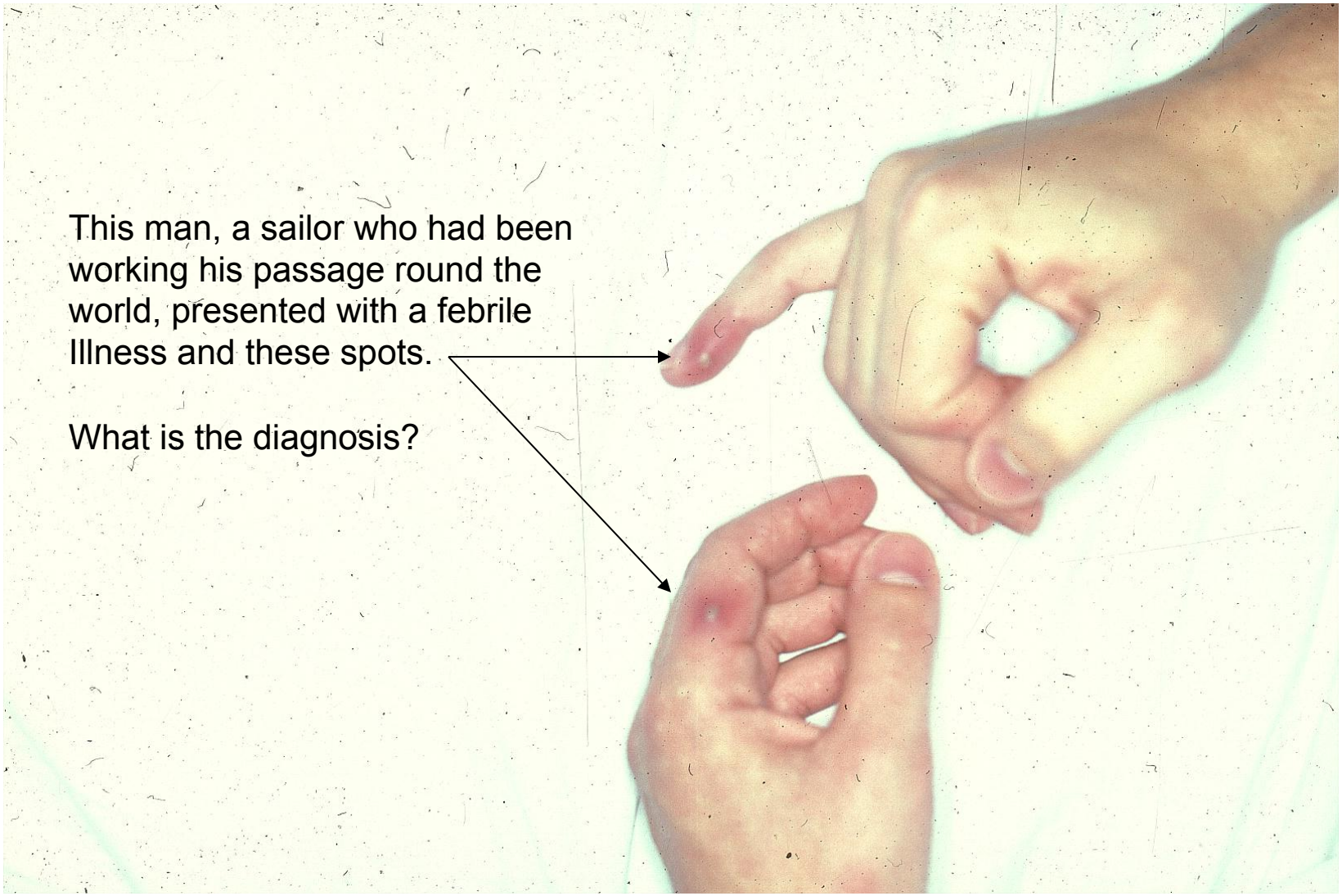
The X-ray shows a raised right hemi-diaphragm with no evidence of pulmonary collapse or fibrosis to pull it up, and with no reason to suspect a phrenic nerve palsy, the supposition is that something was pushing the diaphragm up.

And that “something” was an amoebic liver abscess, and which was pointing just inferior to the ribs (and with tenderness on gentle rib percussion. Aspiration yielded about three litres of “anchovy sauce” pus. Amoebic abscesses usually do not need aspirating if they are not in danger of rupturing and metronidazole effects a cure.

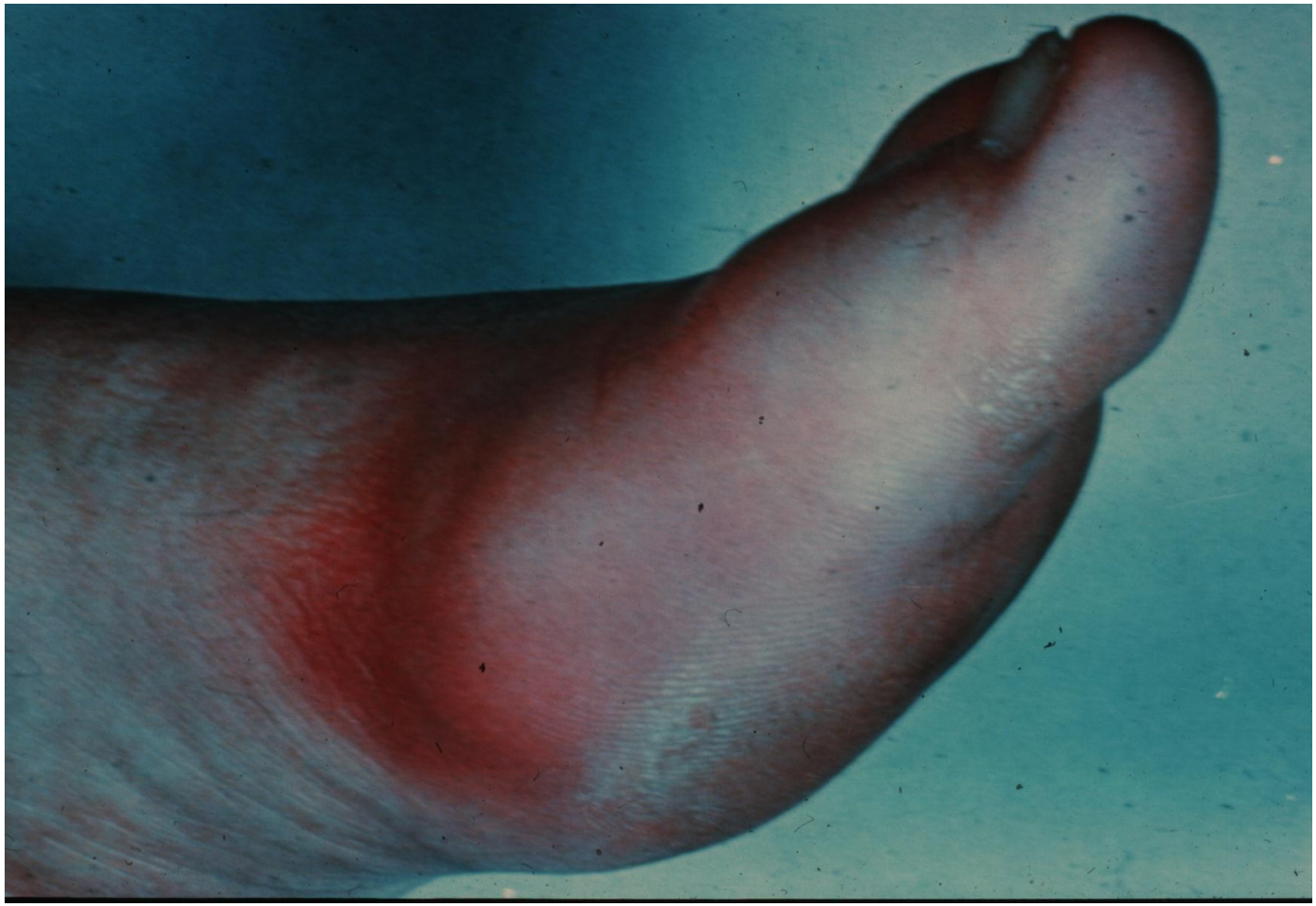
Interestingly, the conventional wisdom is that the right diaphragm is normally higher than the left because it is pushed up by the liver. Could this be true? No, chest X-rays are usually taken with the patient upright and the liver, being a heavy organ, should pull the diaphragm down, not push it up. The correct interpretation is that the left diaphragm is depressed by the heart.

This man, a sailor who had been working his passage round the world, presented with a febrile Illness and these spots.

What is the diagnosis?



These are the typical spots that may be found in gonococcal septicaemia. The pustules are typically surrounded by a red halo. Diagnosis is made by Gram stain and culture of the pus and blood cultures. Endocarditis may be a complication of the septicaemia.



What is this?

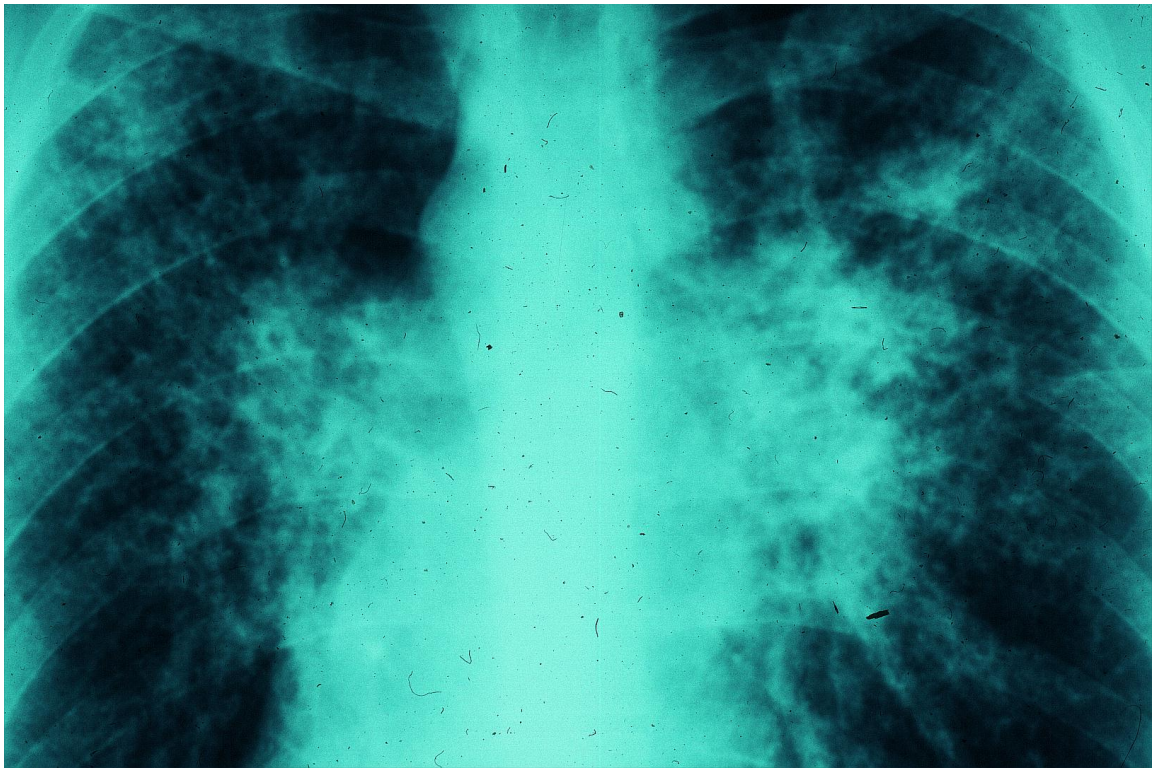
This is likely to be gout. Gout is usually exquisitely painful and patients cannot walk using affected joints.

This is a male patient. Why had he developed gynaecomastia? Clue. What is the patch on his chest (it is not his wife's hormone replacement therapy!)

The patch was a trinitrin patch to treat his angina. Thus he has ischaemic heart disease and may well have heart failure and be receiving a drug that can cause gynaecomastia – spironolactone would be the most likely candidate.

This man had this lesion above his left eyebrow. What are the three major differential diagnoses?

The three major possibilities would be lupus pernio (infiltration with sarcoid tissue), Kaposi's sarcoma, or malignant melanoma. His Chest X-rays shows?



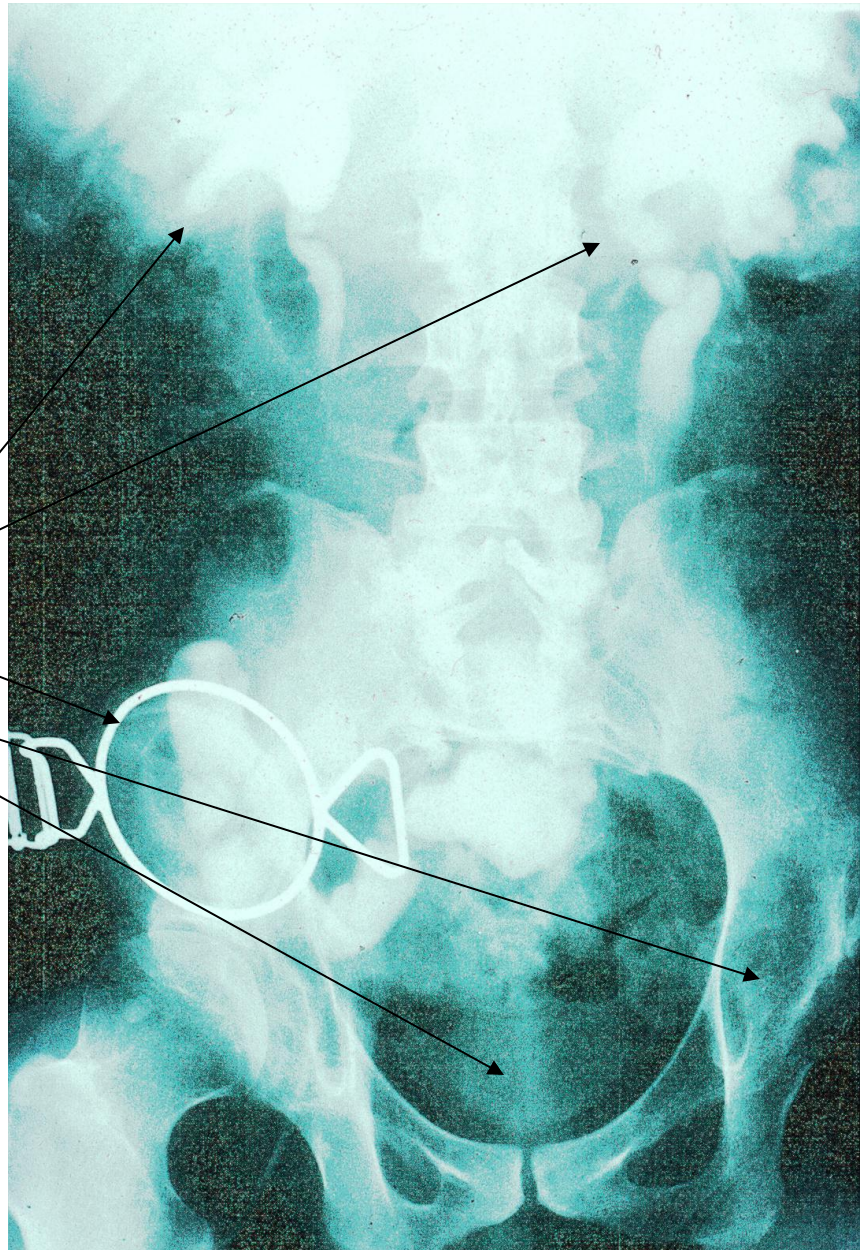
The Chest X-ray show infiltrations typical of infiltrative sarcoidosis, affecting middle areas of the lungs. He therefore had sarcoidosis. The prognosis is poor relative to acute sacoidosis which has bilateral hilar lymphadenopathy rather than lung field infiltration.

This is an intravenous pyelogram, in which the kidneys excrete a radio-opaque dye.

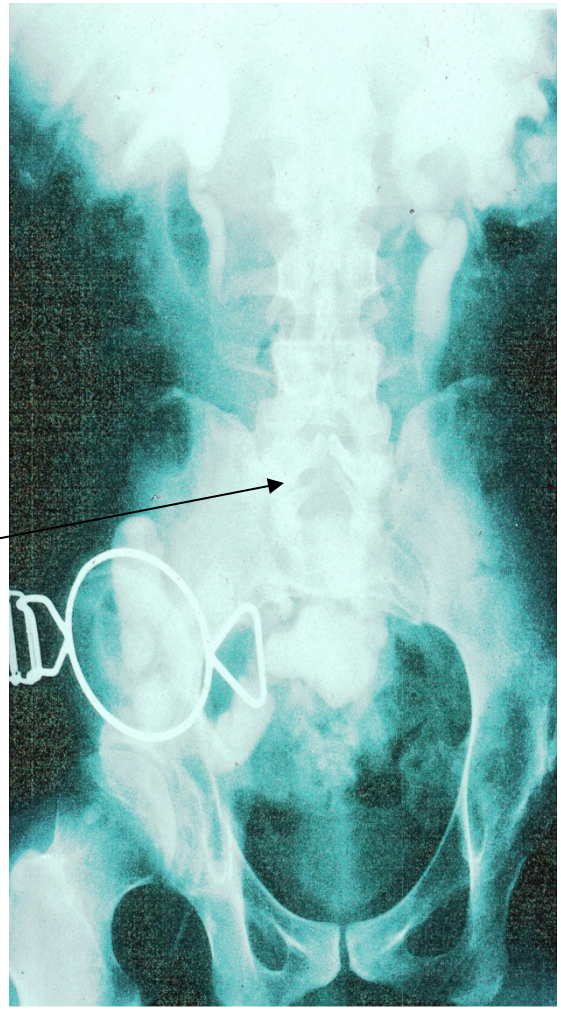
There are 5 major abnormalities

1
2
3
4
5?

and the fifth explains the others

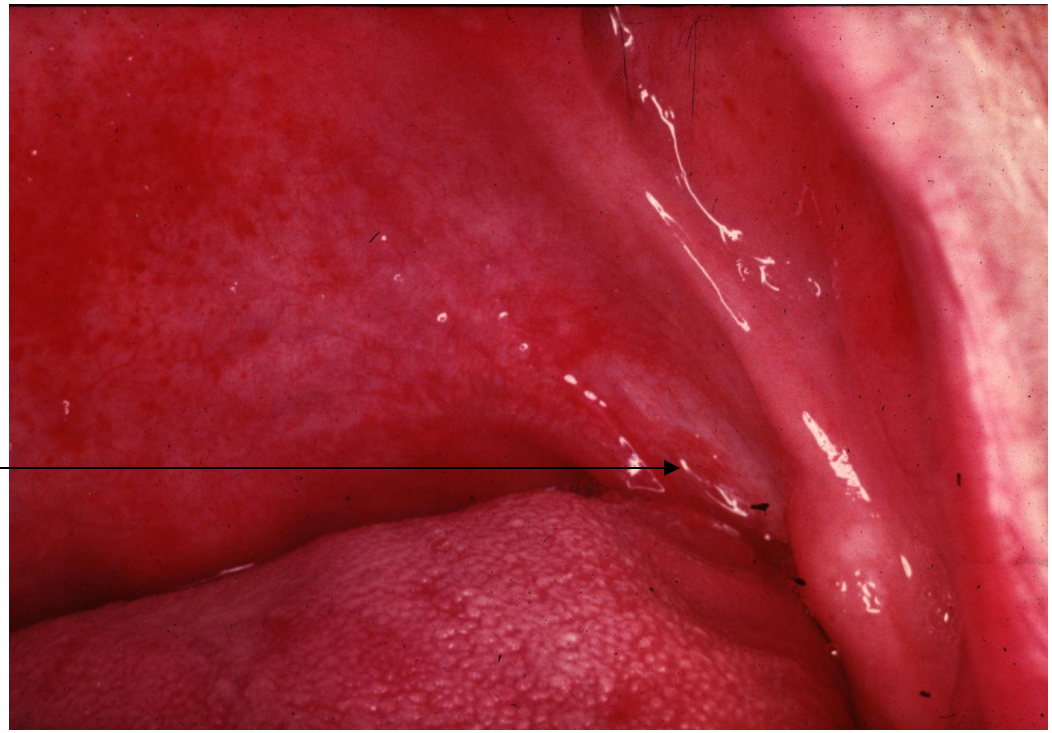


1. There is clubbing of the calyces and dilation of the ureters suggesting anatomical or physiological obstruction.
2. There is a metal ring and urine is seen in a tubular entity beneath this. This is an ileal loop bladder.
3. The head of the femur is absent and the acetabulum is underdeveloped. This suggest a neurological lesion such that it was not worth replacing the head in the acetabulum because it would dislocate again.
4. There is no urine in the bladder, suggesting that there was significant **bilateral** obstruction such that the surgeon decided that all urine should enter the ileal loop.
5. And the unifying fifth abnormality? Spina bifida



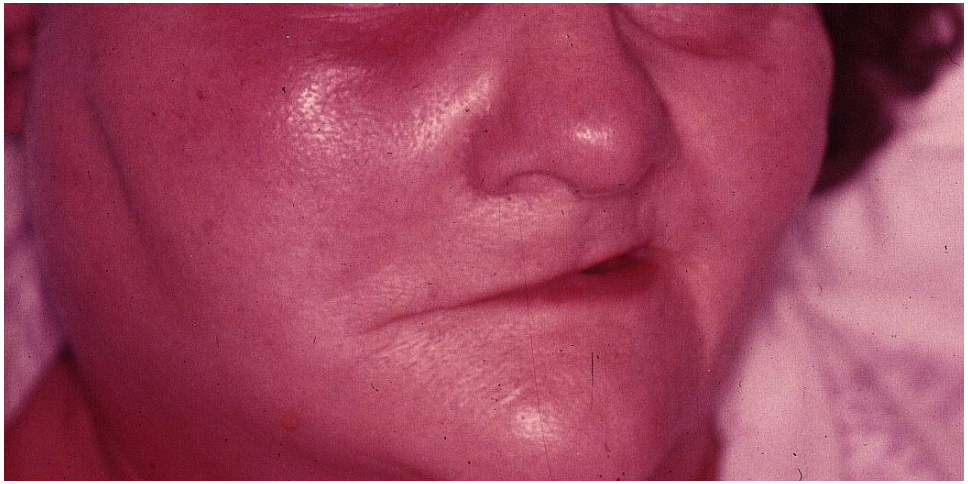
This gay man had a sore throat and recalled a penile ulcer about five weeks previously.

What is this?

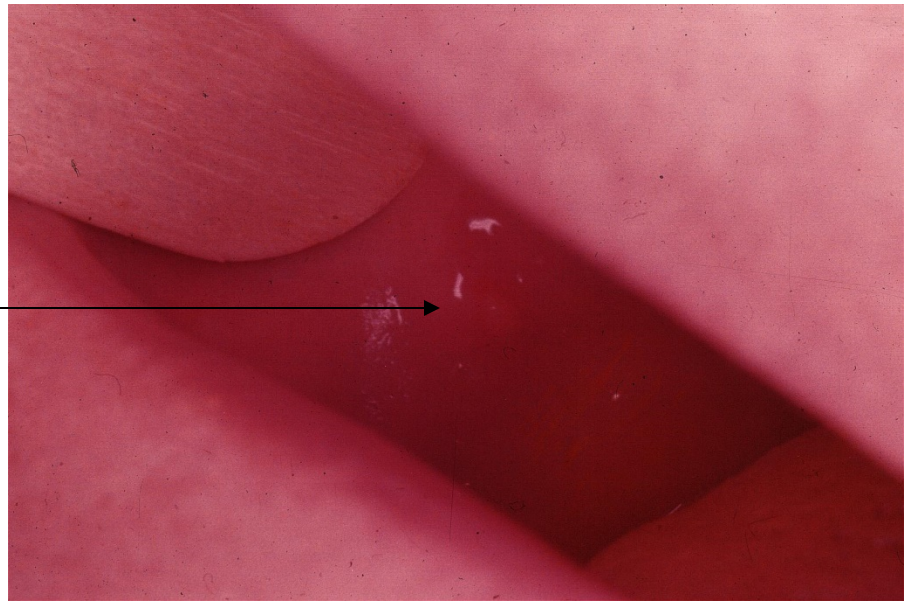


This is a snail track ulcer and the patient thus had secondary syphilis.
He also had a non-itchy copper coloured rash on his hands, and a vague headache, again typical of secondary syphilis.

This patient had developed a right facial palsy with a tender parotid gland

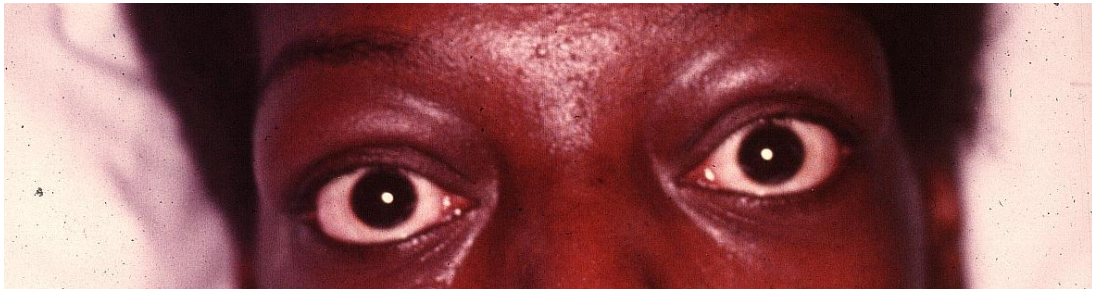


On pressing her parotid, a bead of us protruded from her parotid duct.



What is the diagnosis?

This is septic parotitis. It is an ENT emergency - if the gland is not decompressed then the facial palsy may be permanent. Antibiotics will not act fast enough to reverse the situation.



Believe it or not, this lady was admitted to an infectious diseases unit because of diarrhoea! She was acutely unwell, had a fever of 39 degrees Centigrade, a pulse of 120 and a blood pressure of 90 systolic. She had been feeling anxious and heat intolerant for several months? What is the diagnosis and what is the management?

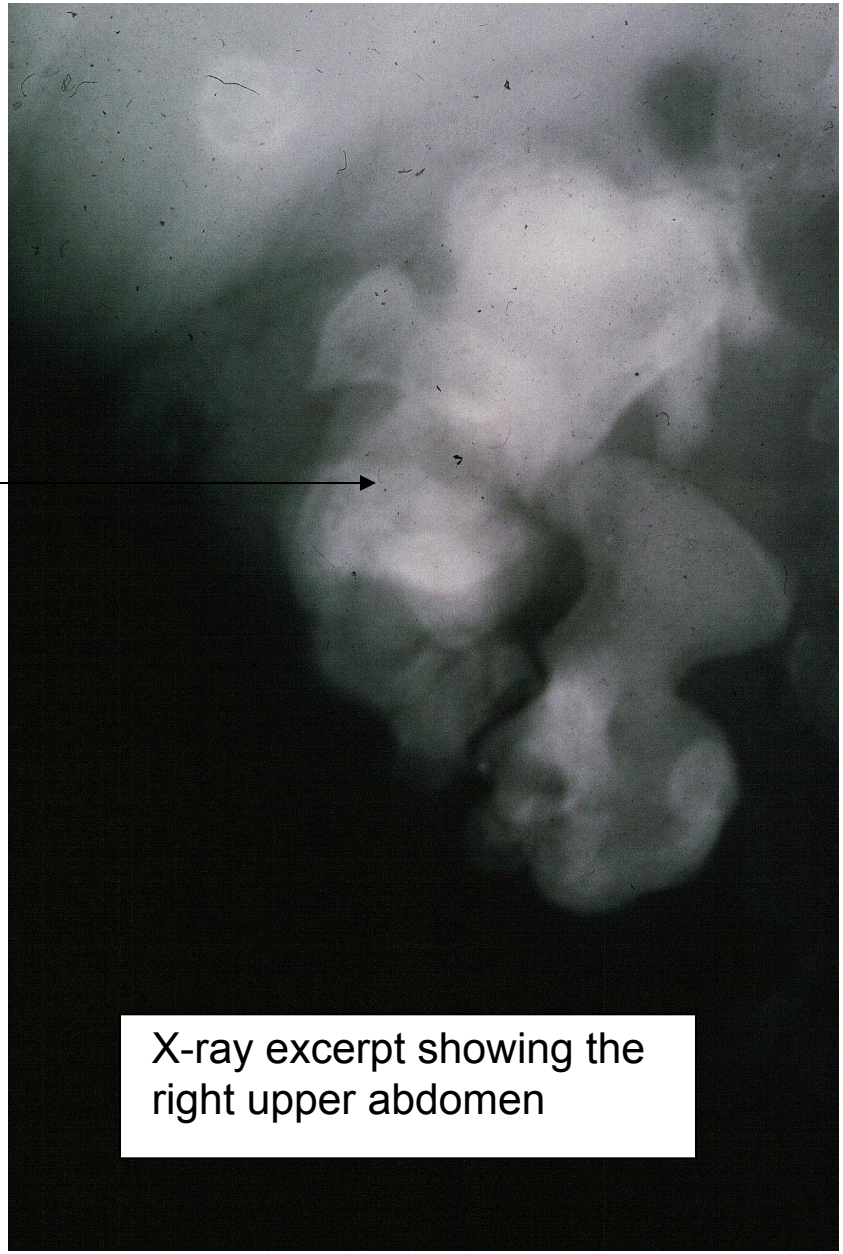
This lady was having a thyroid crisis “thyroid storm.” Her eye appearances suggest that this was Grave’s disease and indeed she had a smooth diffuse goitre with a bruit.

She needs Beta-blockers urgently. She needs Lugol’s iodine which blocks peripheral tissue conversion of T4 to T3. Steroids are often given in this situation although it is not surprising that there are no trials of steroids in what is a very rare condition. She needs to be rehydrated. Anti-thyroid drugs should be started although they will not “kick-in” for several days. Her basal metabolic rate would have been very high and it is not surprising that her blood glucose was almost unrecordable. She also needed intravenous glucose.

This patient complained of episodes of right upper abdominal discomfort.

What is the name of this?

The right kidney was non-functional but the other kidney was normal. Why would a surgeon hesitate before removing the this?



X-ray excerpt showing the right upper abdomen

This is a staghorn calculus. If symptomatic then it would normally be removed. But removal may not help her symptoms because the discomfort, being episodic, might well have emanated from episodes of cholecystitis. Did you not see there was also a large gallstone?

She had both removed at the same time.

This patient had an episode of loss of consciousness. Why?

She has bitten her tongue and there is much haemorrhagic bruising. Anyone who loses consciousness for any reason might bite the tip of their tongue, but the extent and situation of the appearances shown suggest epilepsy. Likewise anyone with a full bladder who loses consciousness for any reason may be Incontinent of urine. With grand mal epilepsy the sudden loss of consciousness with generalised stiffness followed by jerking
movements will be diagnostically significant.

Epilepsy is one of the few conditions where patient can fall abruptly “as if poleaxed” and injure themselves. Other conditions that may do this include an episode of complete heart block (Stokes Adams attack) or vertebrobasilar Insufficiency precipitated by looking upwards.

This doll was observed (on a children's ward). The consultant was able to offer a diagnosis! What was it? Clue. Patients with a hemiparesis often do not take their paretic limb from beneath bedclothes.

The doll had a left hemiparesis and a complete ptosis on the right. This is an example of a “crossed paralysis” and the brainstem on the right is the only site that a single lesion could cause both. Note that a Horner’s syndrome does not cause a complete ptosis - only a third lesion may do this. The conventional wisdom is that the ptosis of a third nerve lesion is caused by weakness of levator palpebrae superioris. No, it is caused by the unopposed action of Orbicularis oculi muscle (that has fibres that arch through the eyelid).

It does happen in real life: this patient had a right hemiparesis and a left ptosis.

This patient was mentally impaired. What might his plain X-ray of abdomen show?

The plain X-ray showed a motely collection of metallic objects including nuts, bolts, screws, half a pair of scissors and a corkscrew. Surgeons had grown tired of operating to remove objects that were static in the stomach.

This was before the days of endoscopic removal. Today the patient would be anaesthetised, intubated, a wide bore "hosepipe" tube passed into the stomach, an endoscope passed via the tube, and each object grasped by a pair of forceps passed through the endoscope, the object being withdrawn into the tube along with the endoscope, and the whole lot withdrawn up the oesophagus (the object would not scratch the oesophagus as it would be in the lumen of the "hosepipe").

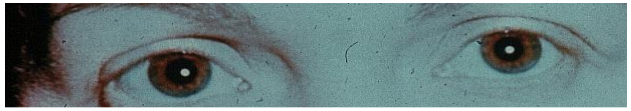
This is what?

And what is it often mistaken for?

This is a Mongolian blue spot, a vascular phenomenon which Is more common in Asian children. It can be mistaken for non-accidental injury.

This patient was given a drug and within seconds the appearance changed.

What was the drug and what was the diagnosis thereby revealed?



She was given tensilon and this reversed the ptosis of myasthenia gravis.

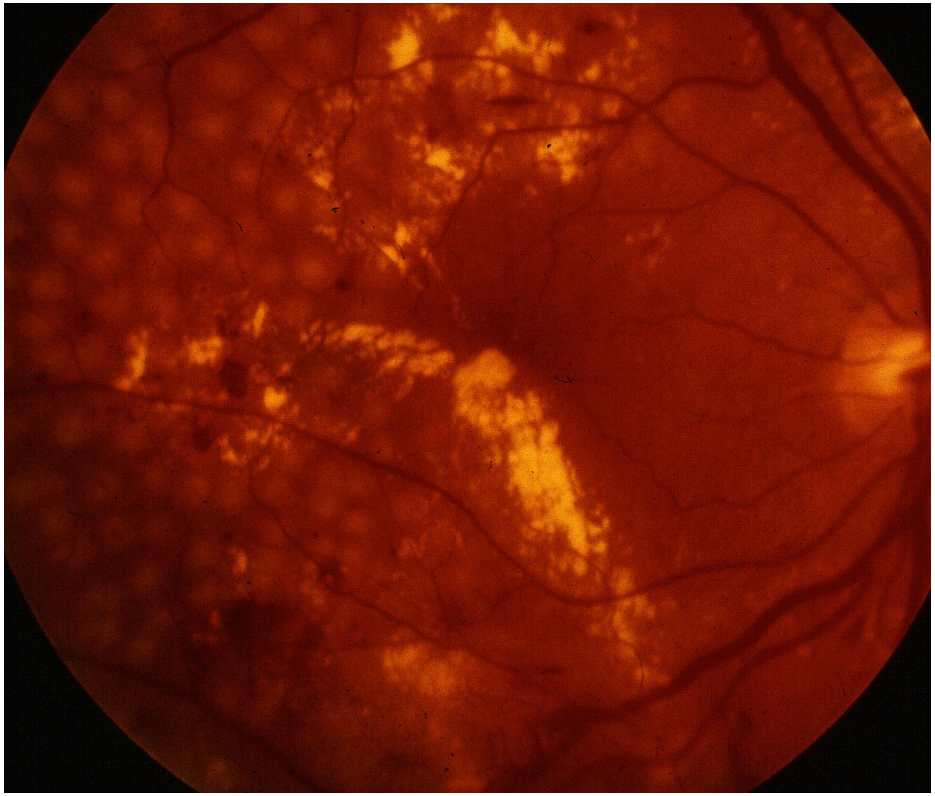
This patient required to be told that he was “allergic” to his watchstrap system. To what was he “allergic?”

This is a classical appearance of nickel “allergy.”

What two diagnoses can be made?

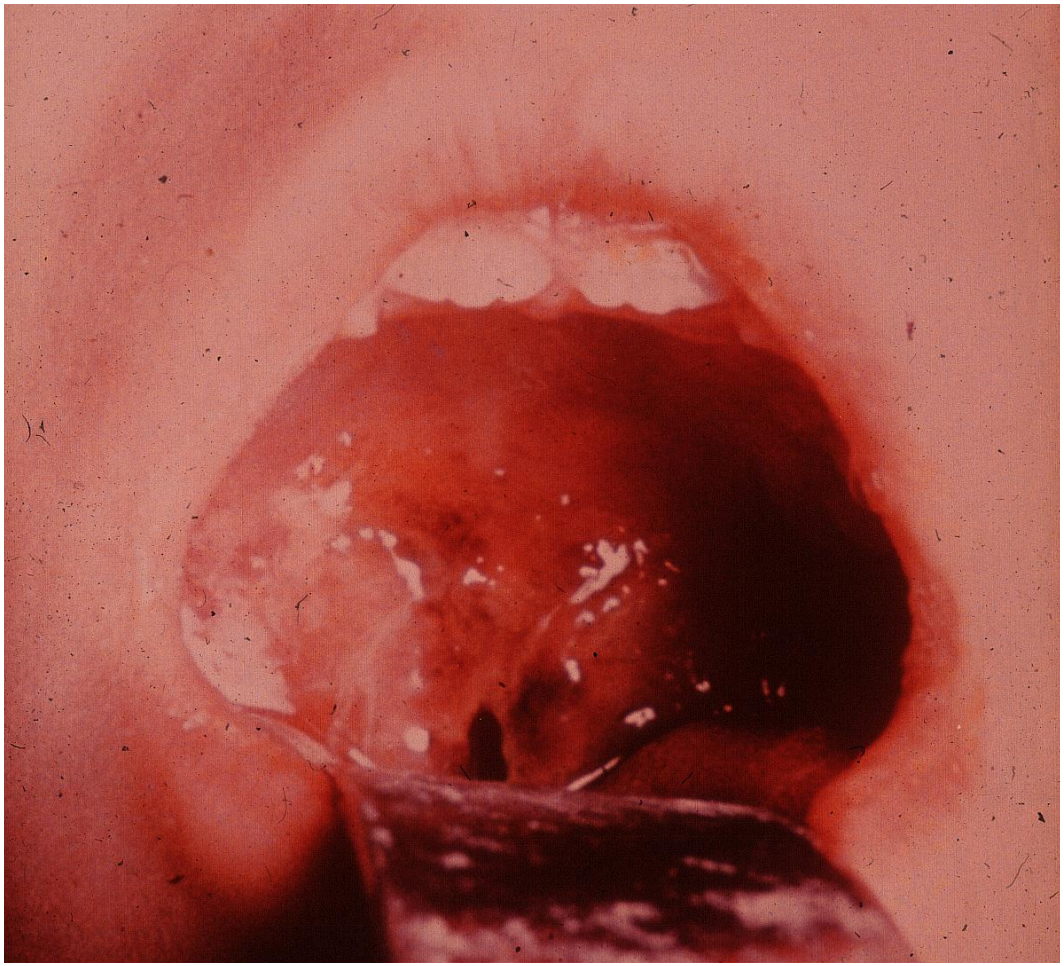
The patient has dermatographia and the physician who took the photograph has megalomania (an excessive high opinion of his self-importance) – not all physicians think it appropriate to mark their patients with the intial of their surname!

What abnormalities are to be seen, and what is the diagnosis?



This is diabetic retinopathy. There are exudates, haemorrhages and some proliferation of retinal vessels. In addition there are numerous laser scars.

What is the diagnosis?



Courtesy of Dr RTD Emond.

This is diphtheria. The membrane spreads outwith the tonsillar area, is tightly adherent, but may be scrapped off to reveal a raw area beneath. Respiratory obstruction is an ever present danger, either caused by spread of the membrane or by a bit of it flaking off and obstructing the larynx.

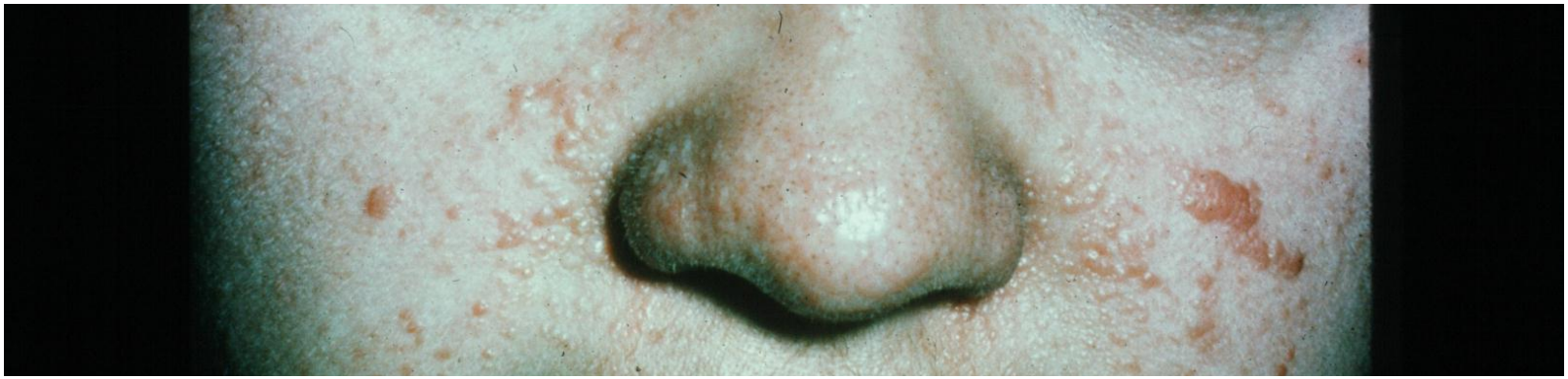
Why has this man a hole in his nasal septum?

What had he been doing?

He had been taking cocaine by “snorting” it up the nose. Cocaine is a very potent vasoconstrictor and had caused ischaemic necrosis of the nasal septum.

Circular punched out ulcers are suggestive of what disease process?

Vasculitis



This patient was admitted because she had a progressive headache. The facial appearances suggested a diagnosis as did the appearance of the retina. What did she have and why did she have surgery within a few hours of this photograph?

This is the facial appearance of tuberose sclerosis - she has fibromatous nodules on her cheeks. She would have fibrous nodules in the brain, but strictly speaking there is no fibrous tissue in the brain, but rather there is gliomatous tissue. She had a cerebral glioma and required urgent operativeintervention.

Her retina showed fibrous patches - phacomata.