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Clinical Update

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April 2023

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Tonight…

- Paronychia, cellulitis, otitis externa, sore throats, shingles
- Discussing feverpain score, sepsis and red flags
- Practical examination session
- Ask questions at the end of every subsection

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Aciclovir 800mg 5/day

Shingles

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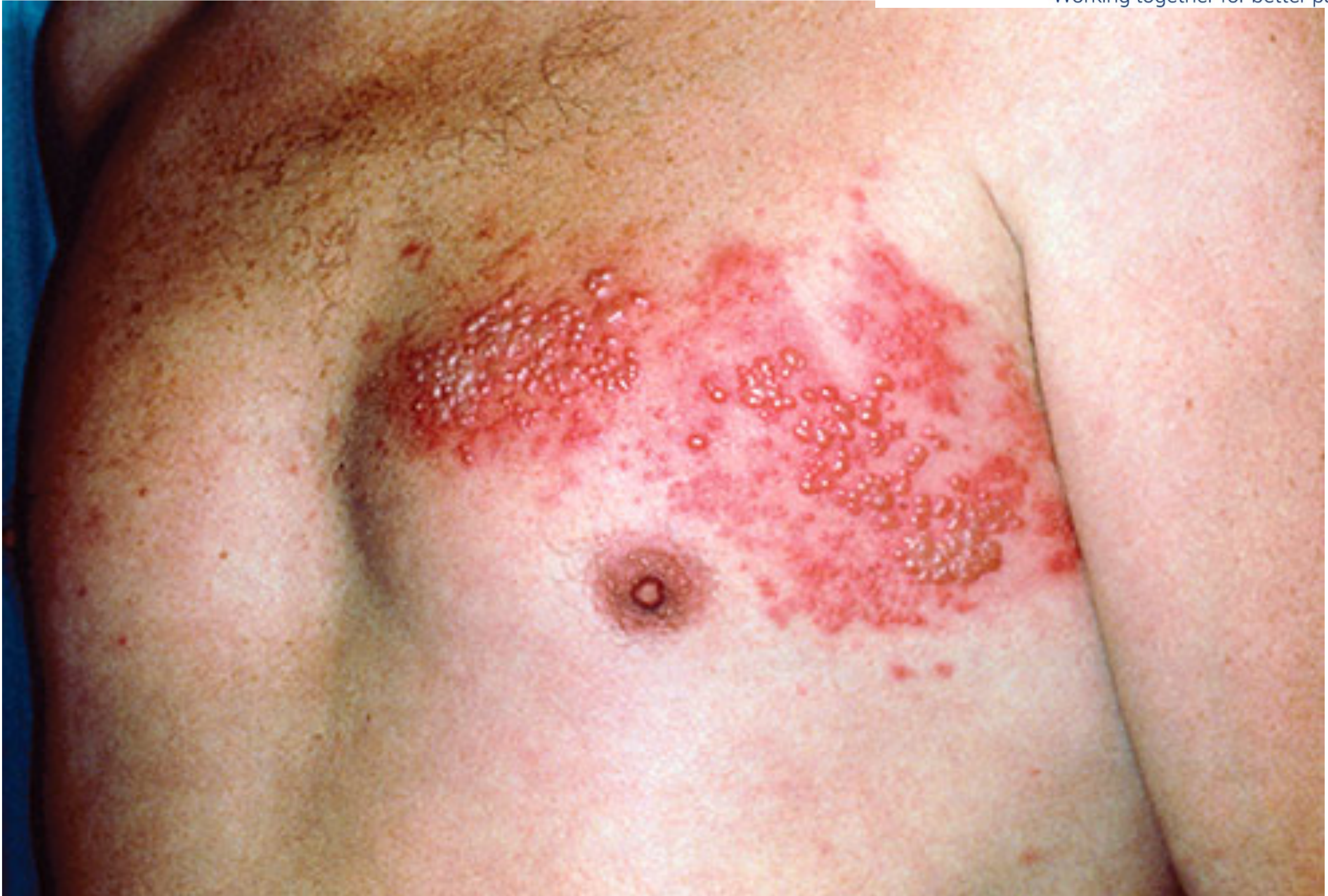

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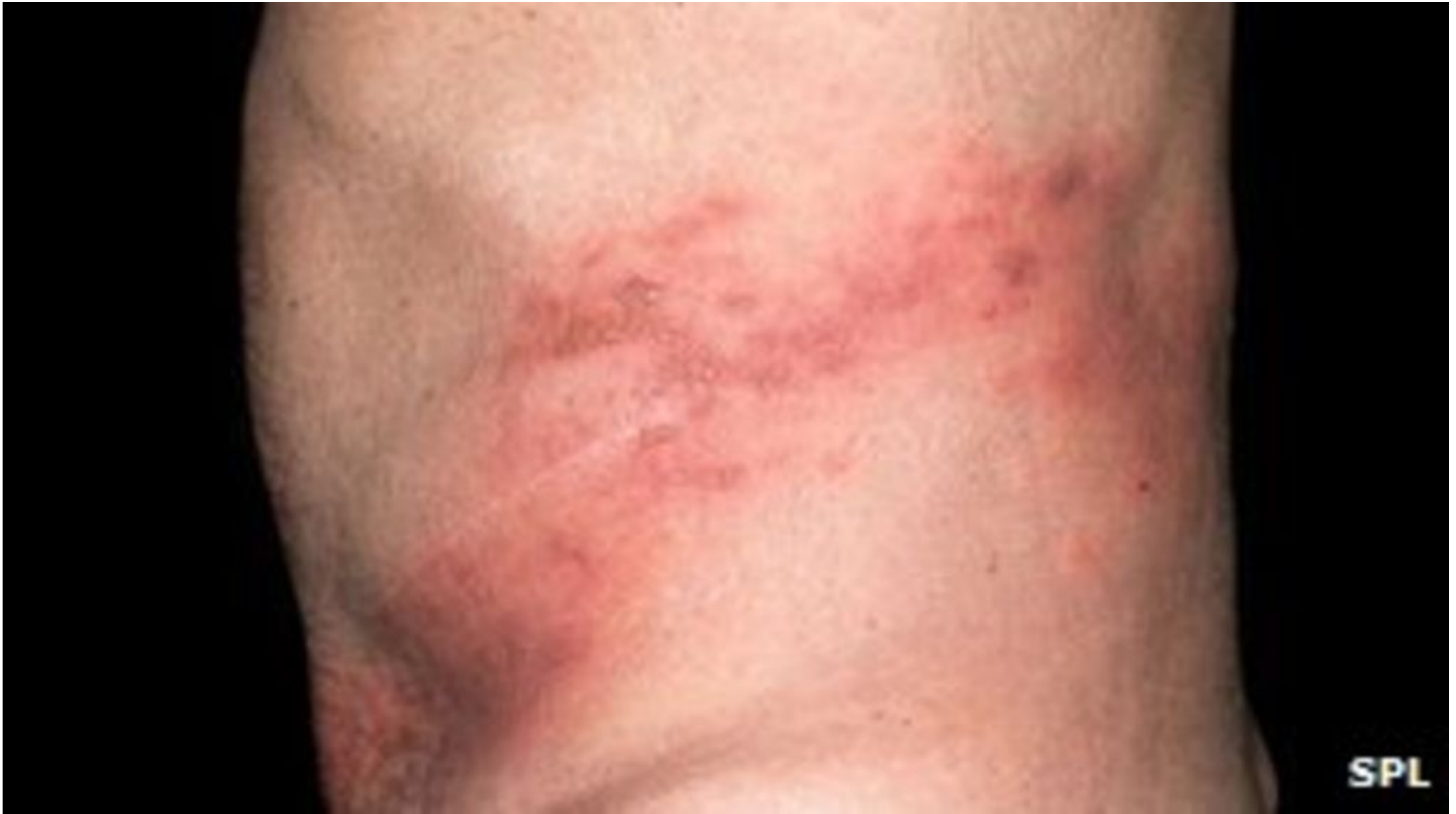

- Shingles is an infection caused by varicella zoster which presents with a tingling or painful feeling in an area of skin, a headache or feeling generally unwell with a usually unilateral rash appearing a few days later.
- The rash will usually appear on chest, abdomen, back but can also affect face, genitals and eyes.
- The rash is initially blotchy and then becomes itchy vesicles which later dry out and scab over. The rash is painful until after the rash has gone.

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- Start Aciclovir within 72 hours of rash onset, to reduce pain and severity for:
  - Anyone aged 50 years and over
  - People aged 18- 50 years with any of the following criteria:
    - Non-truncal involvement (such as shingles affecting the neck, limbs, or perineum).
    - Moderate or severe pain
- Moderate or severe rash.

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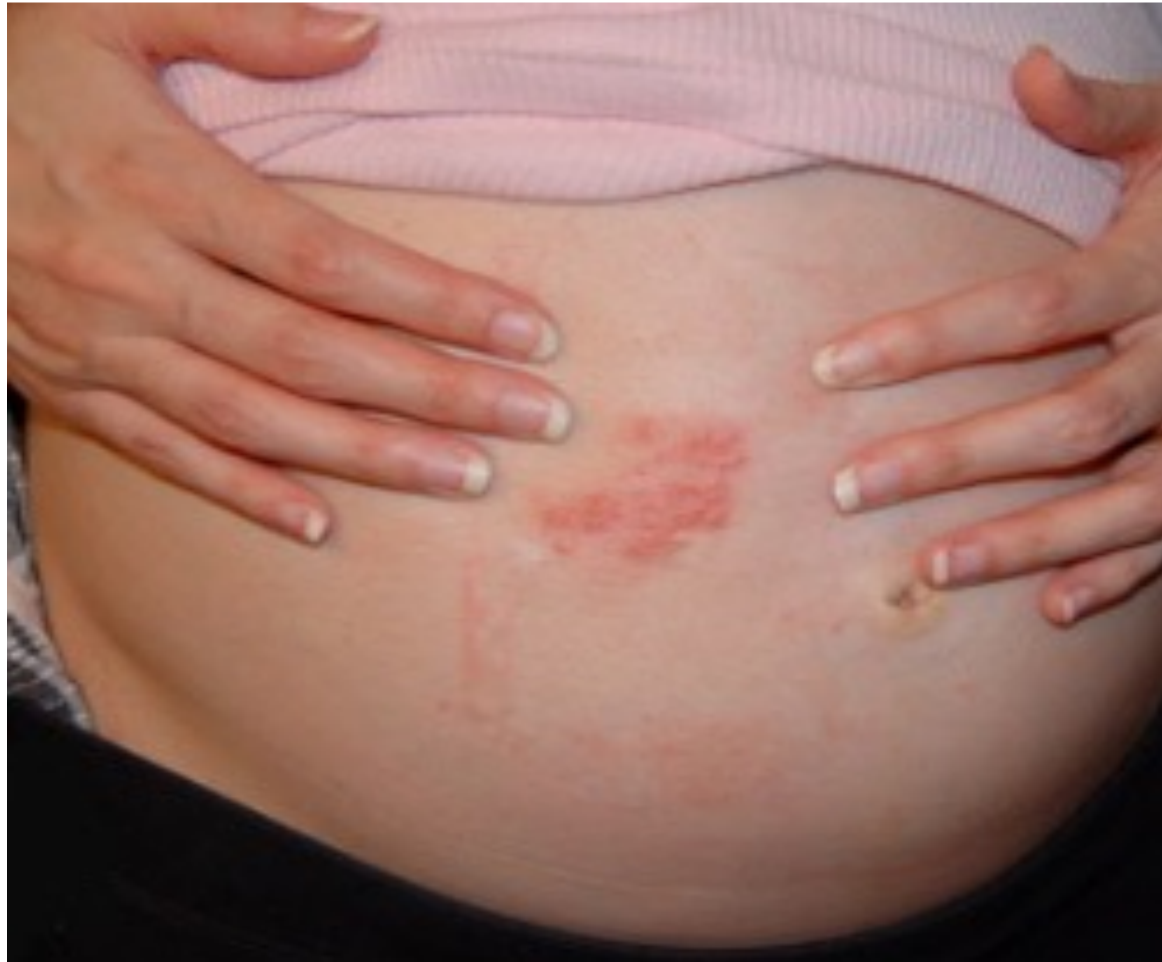

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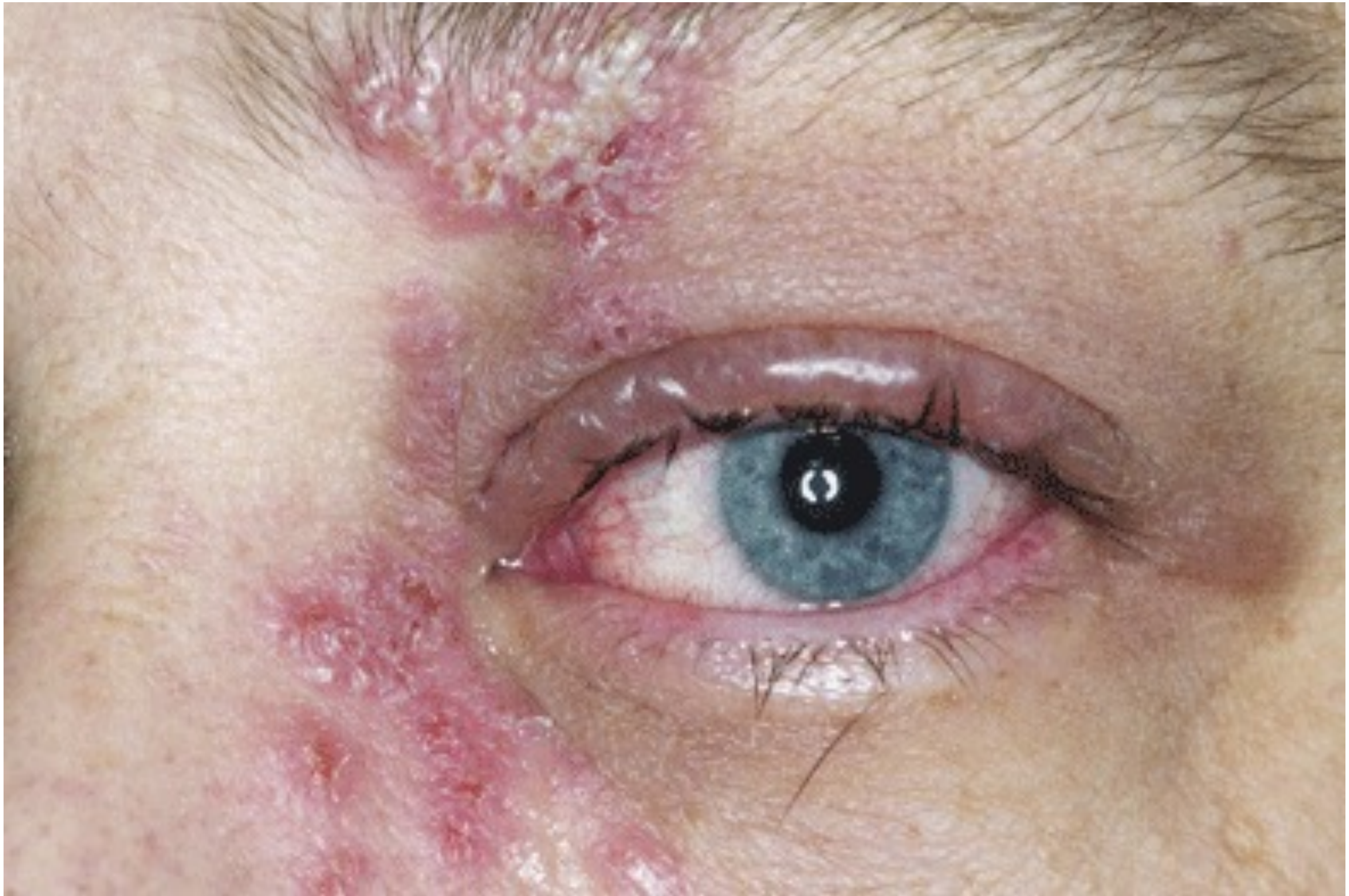

Exclusions:

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- Patients with severe renal impairment, e.g. Chronic Kidney Disease stages 4 or 5, or where creatinine clearance is <25ml/minute
- Pregnancy (refer urgently to primary care)
- Breast-feeding (refer urgently to primary care)
- Immunocompromised (refer urgently to primary care)
- Ophthalmic involvement (seek immediate specialist advice or refer immediately to eye casualty)
- Some higher risk patients with shingles (continued vesicle formation, older age, immunocompromised or severe pain) can have aciclovir up to 1 week after rash starts so refer these patients to primary care urgently
- Aciclovir tablets are contraindicated in patients known to be hypersensitive to aciclovir and vanciclovir or to any of the excipients
- Patient also taking ciclosporin, mycophenolate, tacrolimus or theophyllines

Advice

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- Advise patients to avoid contact with immunocompromised pregnant women, infants 4 weeks old or younger.
- School/ work exclusion until all of vesicles have crusted over
- Rash- Use paracetamol to ease the pain , keep rash dry and clean, wear loose fitting clothing, avoid sharing clothes an towels, cover rash not under clothes while rash is still weeping, avoid dressings/ creams on rash, use a cool compress (a bag of frozen vegetables wrapped in towel or wet cloth) a few times per day.
- Advise can take up to 4 weeks for rash to heal and that the skin can be painful for weeks after the rash has gone but will settle in most people over time,
- Hydration status: Care should be taken to maintain adequate hydration in patients receiving higher dose oral regimens, e.g. for the treatment of herpes zoster infection (4g daily), in order to avoid the risk of possible renal toxicity

Onward referral

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- If the rash spreads or there is no improvement after 7 days, seek medical advice from GP / Practice Nurse.
- Need to see GP if develop any complications :
- Secondary bacterial skin infection – erythema, tenderness or new fever after initial improvement
- Systemically unwell

Any Questions?

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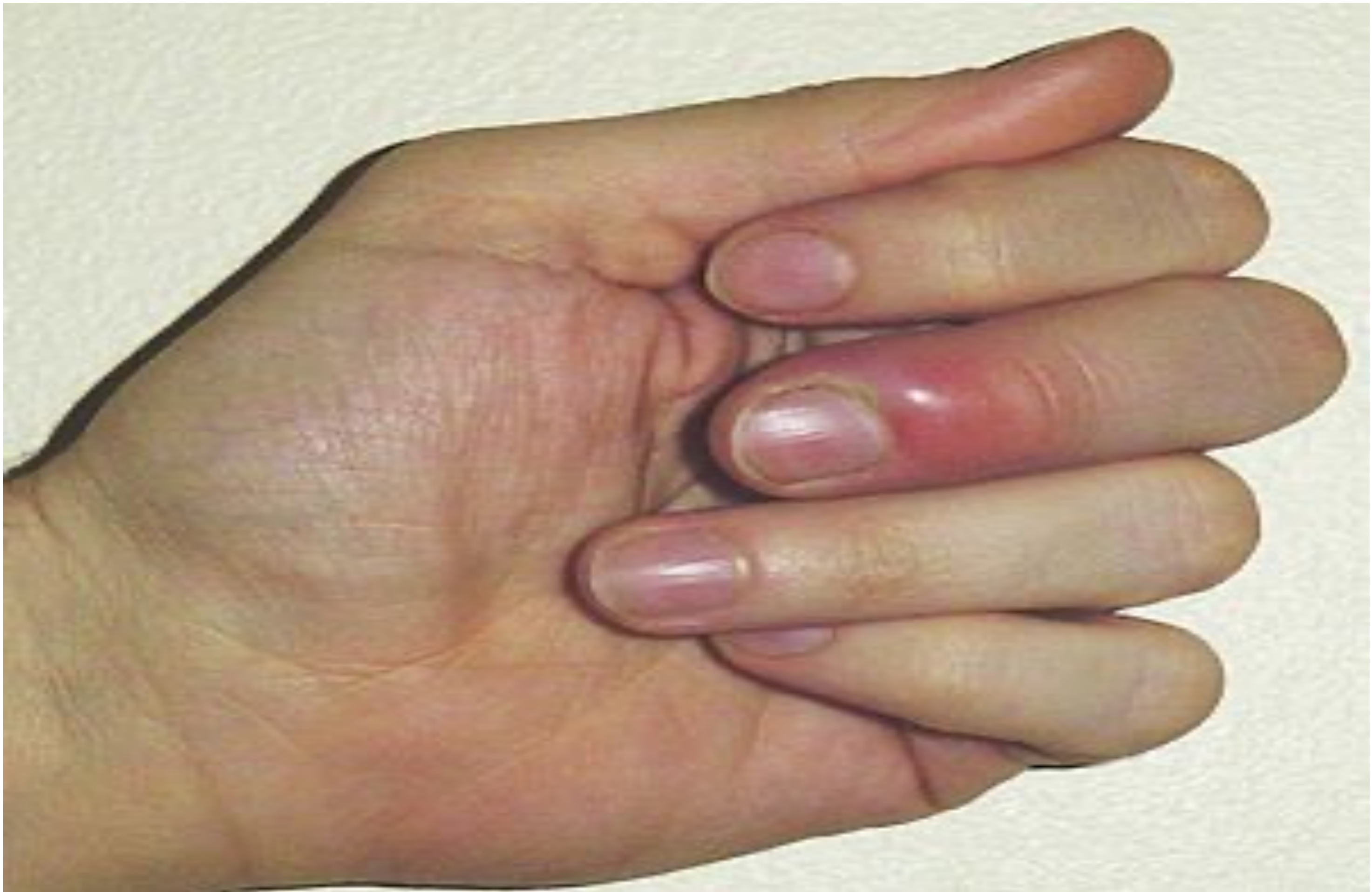
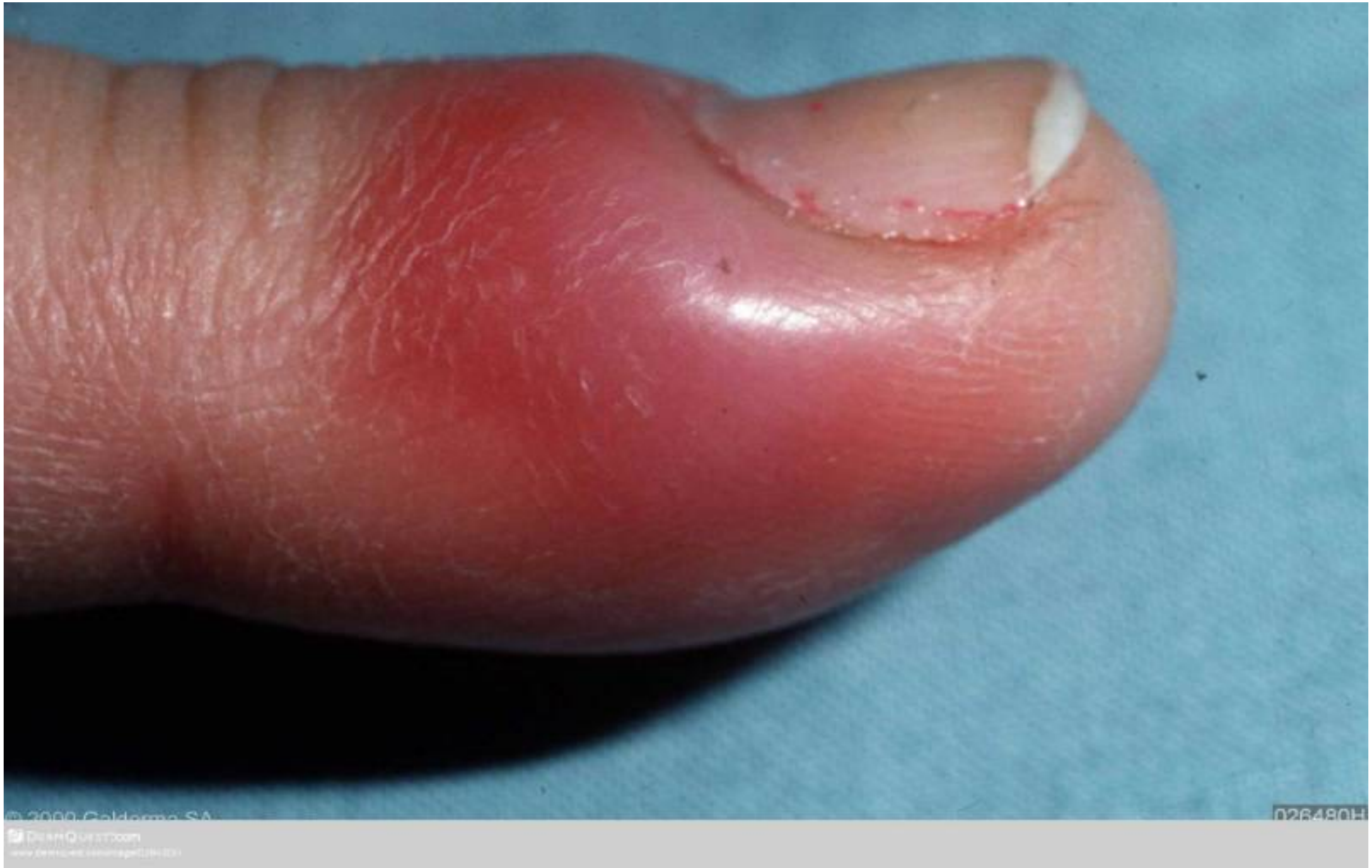
Flucloxacillin 500mg qds/ Clarithromycin 500mg bd

Cellulitis, insect bites and paronychia





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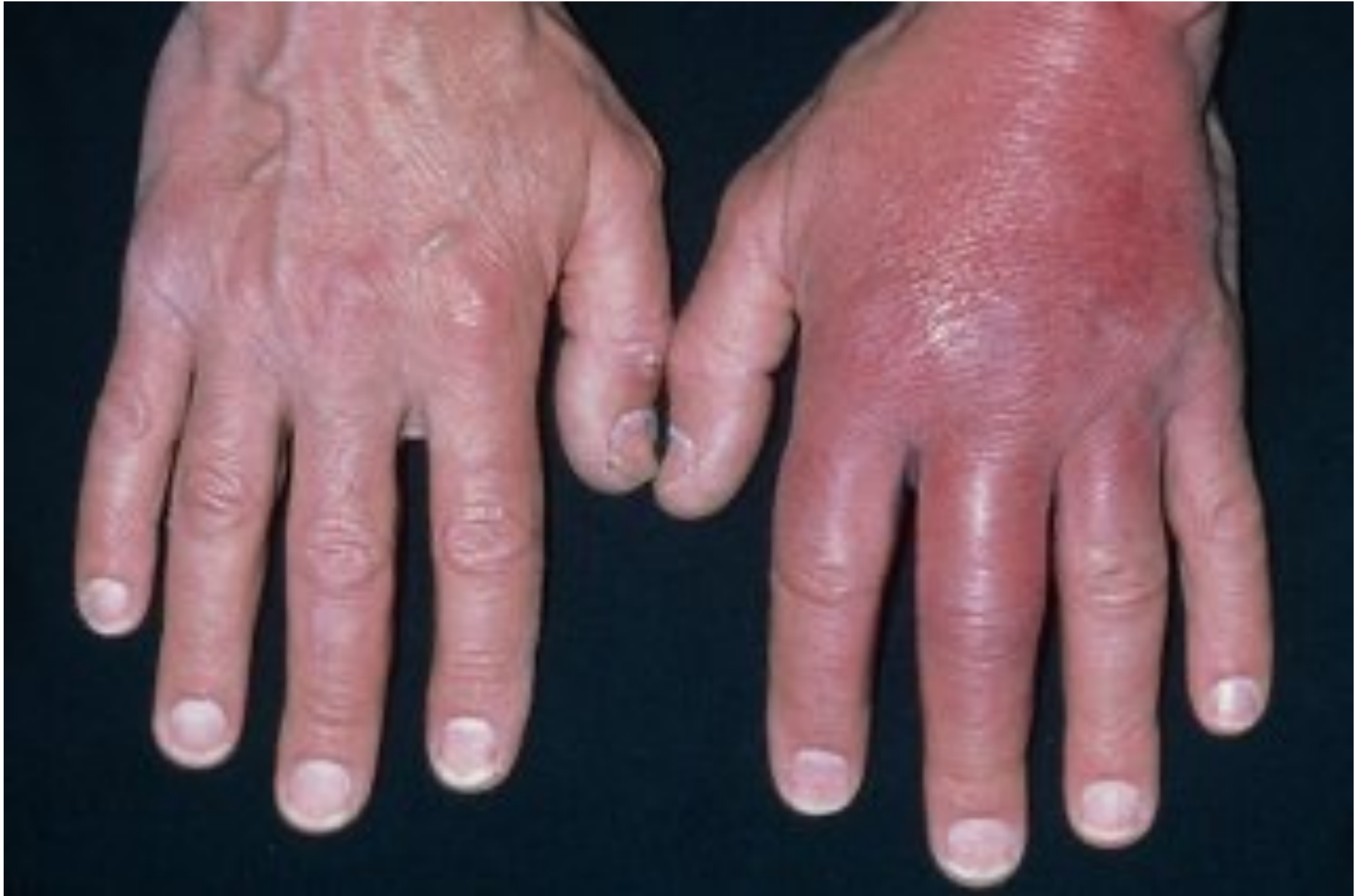
- Cellulitis is usually caused by streptococcus pyogenes or staphylococcus aureus
- Patients present with acutely red, painful, hot swollen, tender skin with rapid spreading, fever and malaise can also be systemic complications.



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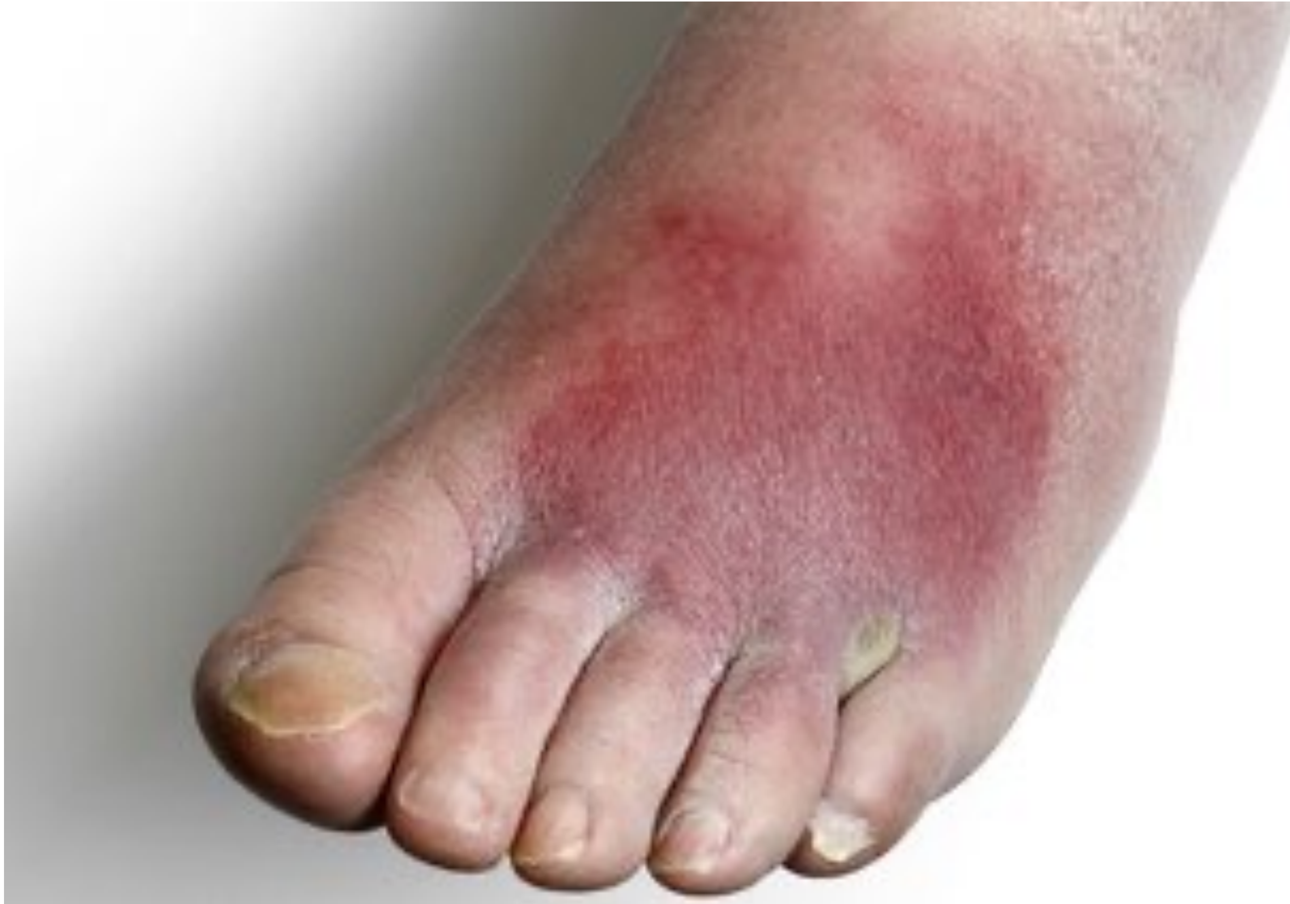
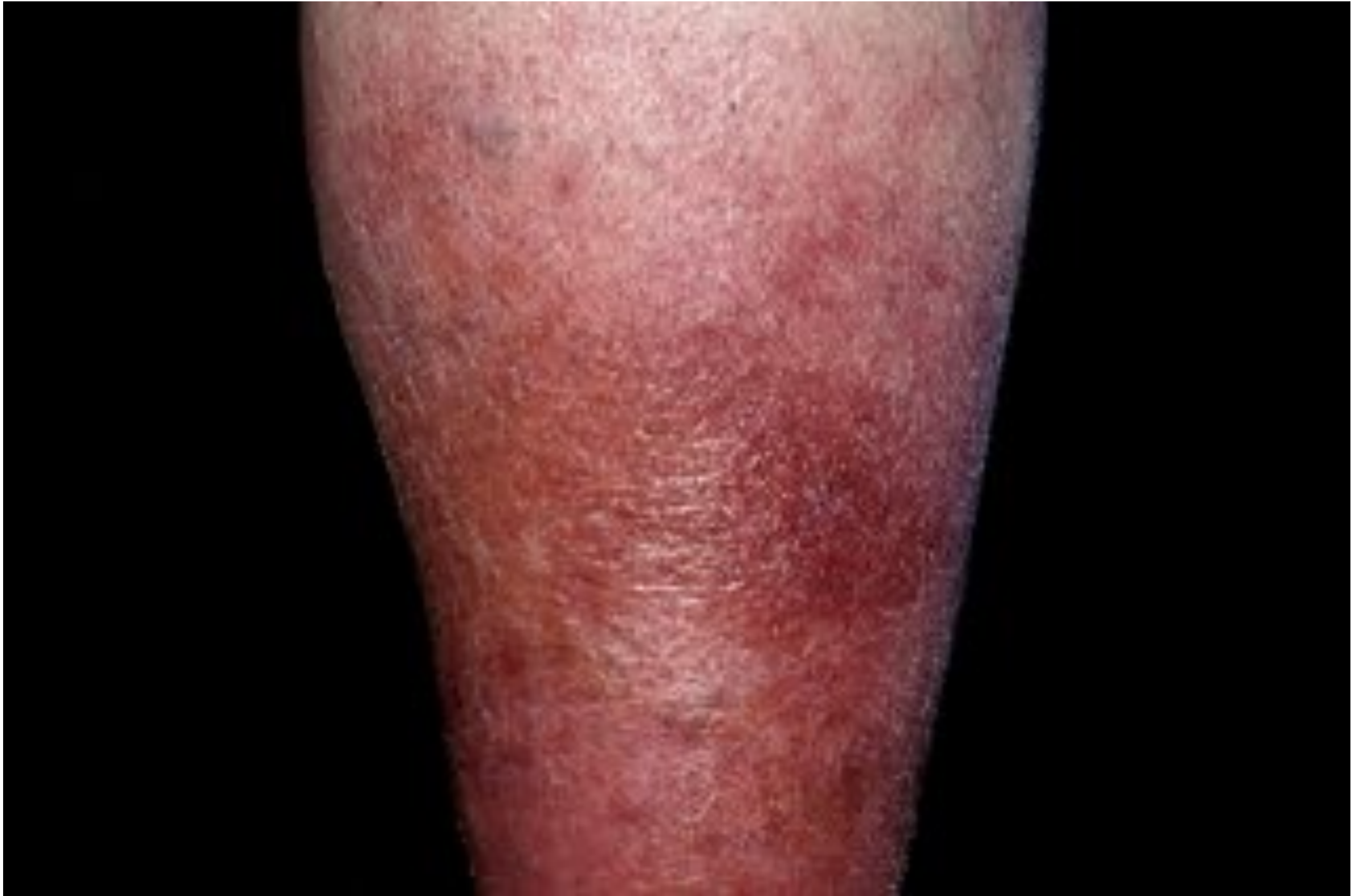
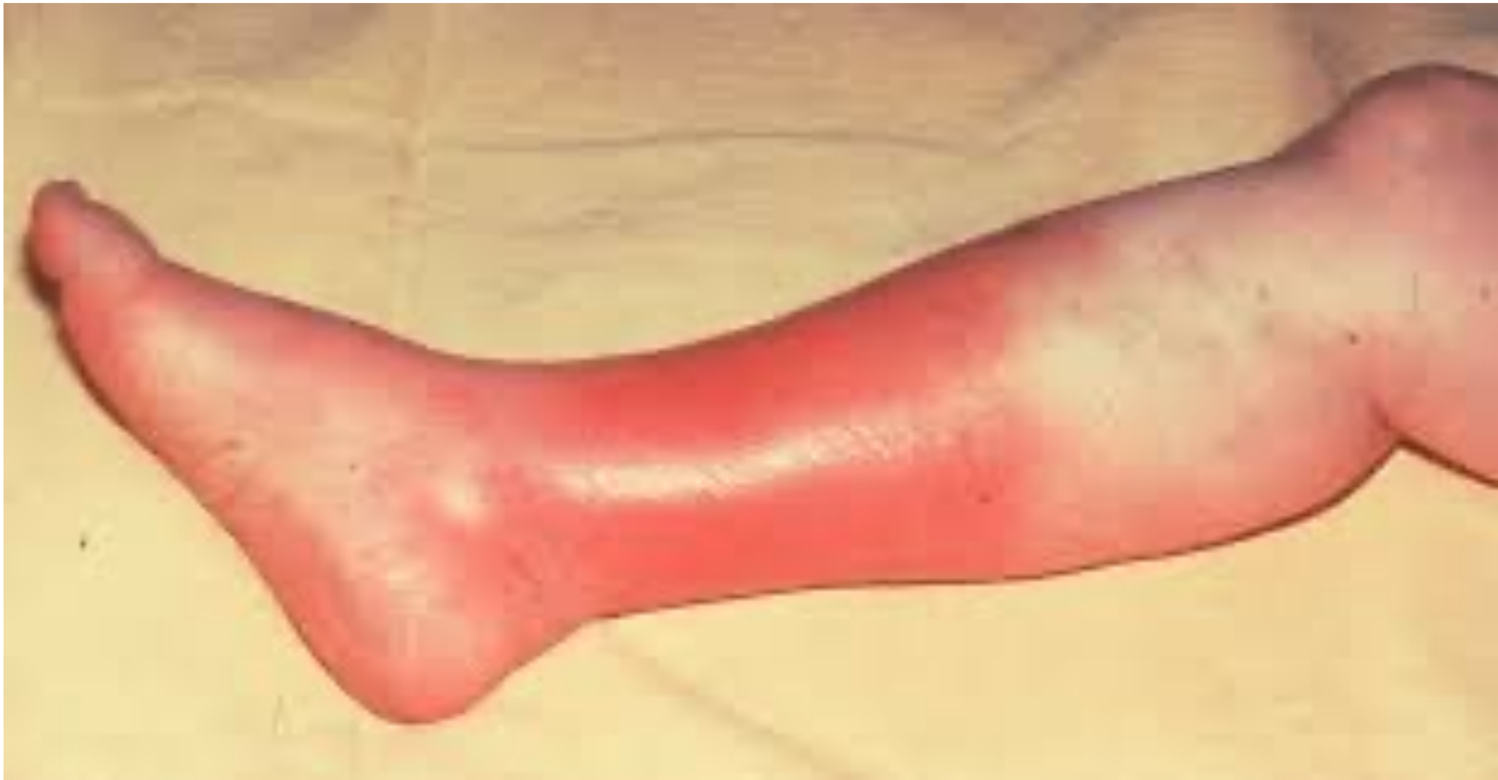




- **When should I suspect cellulitis?**
- **Typical features of cellulitis include:**
  - An acute onset of red, painful, hot, swollen, and tender skin, that spreads rapidly.
  - Fever, malaise, nausea, shivering, and rigors. These may accompany or precede the skin changes.
  - Unilateral presentation. The leg is the most commonly affected site, and bilateral leg cellulitis is very rare.
- **Examine the person:**
  - Look for a skin break where the infecting organism may have entered, such as a wound, macerated skin, fungal skin infection, or an ulcer.
  - There may be diffuse redness or a well-demarcated edge that can be marked with a pen in order to monitor progress.
  - If the infection is severe, the person may be systemically unwell; tachycardia, hypotension, tachypnoea, or confusion may be present.
  - Bullae and blisters filled with clear fluid, haemorrhage into blisters, bruising, petechiae, dermal necrosis, lymphadenopathy, and lymphangitis may occur.



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	Range	Patients reading
Respiration rate (per minute)	12-20	
Temperature (celsius)	36.1-38.0	
Systolic BP (mmHg)	111-219	
Pulse rate(bpm)	51-90	
Level of consciousness	Alert	

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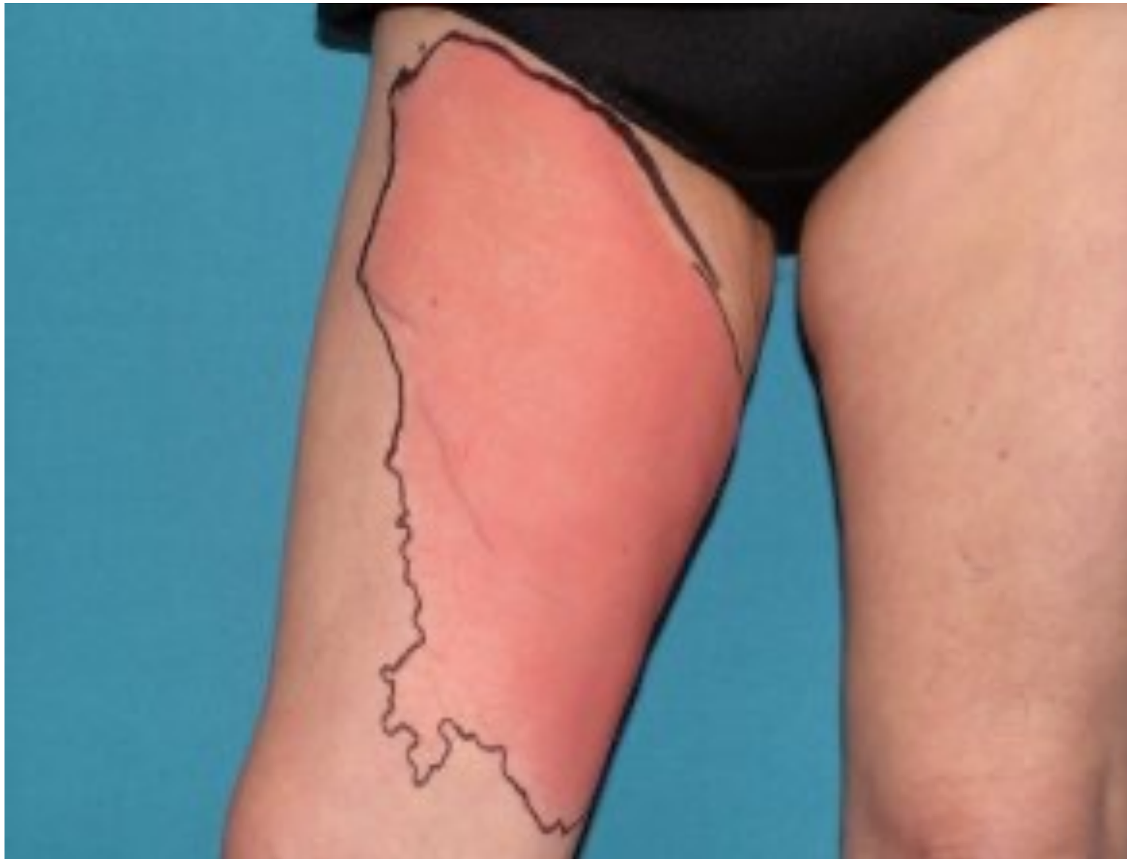
The Eron classification

- **Class I** — there are no signs of systemic toxicity and the person has no uncontrolled co-morbidities.
- **Class II** — the person is either systemically unwell or systemically well but with a co-morbidity (for example peripheral arterial disease, chronic venous insufficiency, or morbid obesity) which may complicate or delay resolution of infection.
- **Class III** — the person has significant systemic upset such as acute confusion, tachycardia, tachypnoea, hypotension, or unstable co-morbidities that may interfere with a response to treatment, or a limb-threatening infection due to vascular compromize.
- **Class IV** — the person has sepsis syndrome or a severe life-threatening infection such as necrotizing fasciitis.



Exclusions

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- Any observations out of range on observation checklist box
- Refer urgently to GP (or A and E) if;
- Patient under 18 years old
- Has Eron Class II, III or Class IV cellulitis.
- Patient has severe or rapidly deteriorating cellulitis (for example extensive areas of skin).
- Patient is frail, immunocompromised or has significant lymphoedema
- Recurrent cellulitis
- Cellulitis where patient is febrile and/or unwell (i.e. features suggestive of systemic infection).

Exclusions contd…

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- Symptoms suggesting this would be vomiting, confusion, unstable comorbidities eg unstable diabetes or vascular compromise (eg patients with peripheral vascular disease).
- Cellulitis from human or animal bite
- Cellulitis related to surgical wound
- Peri-orbital (preseptal) cellulitis
- Facial cellulitis
- Cellulitis with River/ sea exposure
- Diabetic foot infection
- If symptoms suggestive of a Deep vein thrombosis (DVT)- swelling, firmness and pain often in the calf but can present in thigh/ upper limbs rarely. Often less red than cellulitis.
- If pain more marked than clinical features suggest this could be necrotising fasciitis which needs urgent specialist referral.

Exclusions/contd

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- History of MRSA infection or colonisation
- History of injecting drug use (e.g. illicit drugs, anabolic steroids)
- Pregnant or breastfeeding
- Known hepatic Impairment
- Known renal Impairment
- Previous history of flucloxacillin associated jaundice/hepatic dysfunction
- Porphyria
- Informed consent not obtained
- Concomitant use of:
  - Probenecid
  - Sulfinpyrazone
  - Methotrexate
  - Oral typhoid capsuleo Sugammadex
  - Piperacillin
  - Warfarin

Any Questions?

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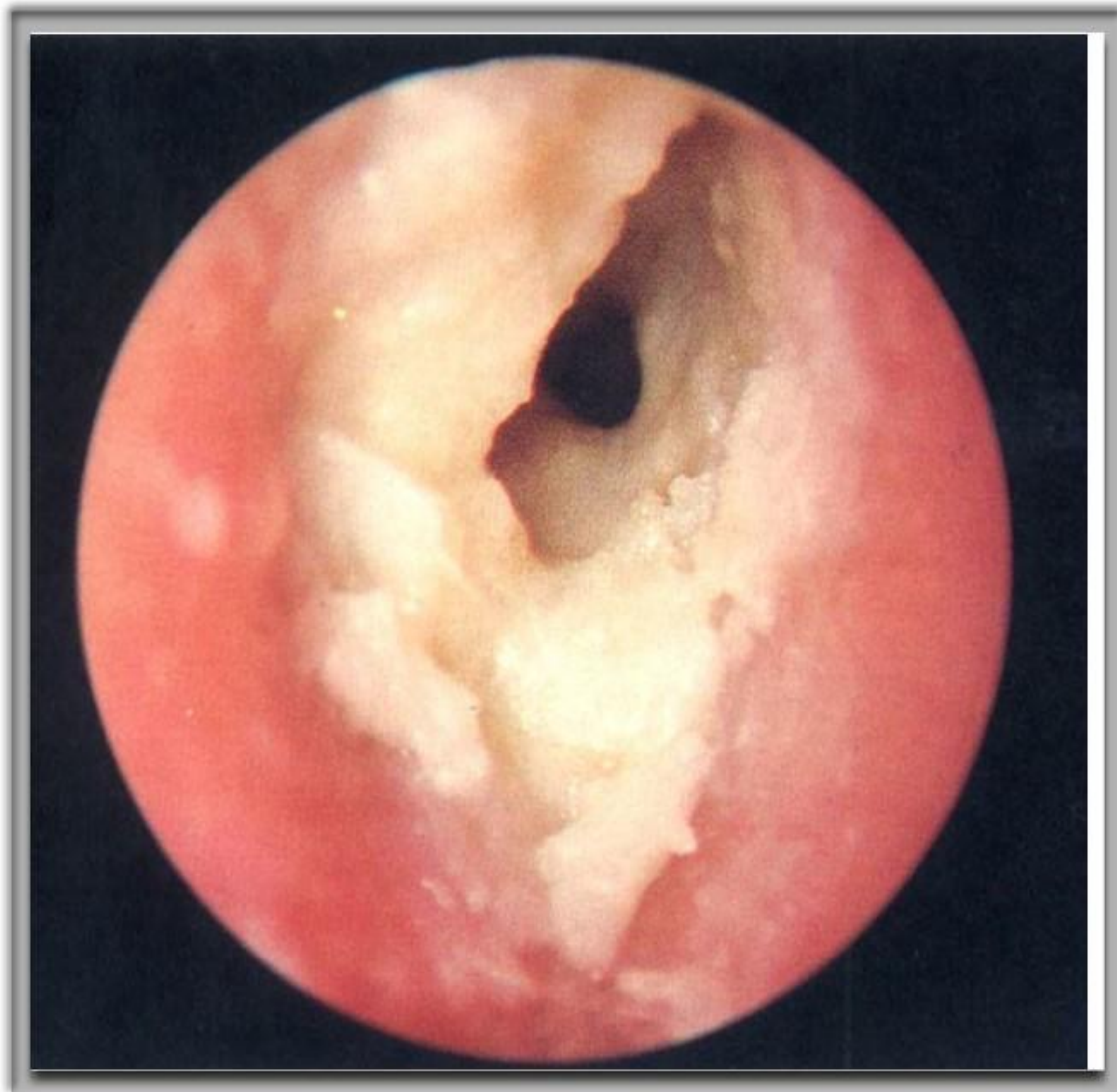
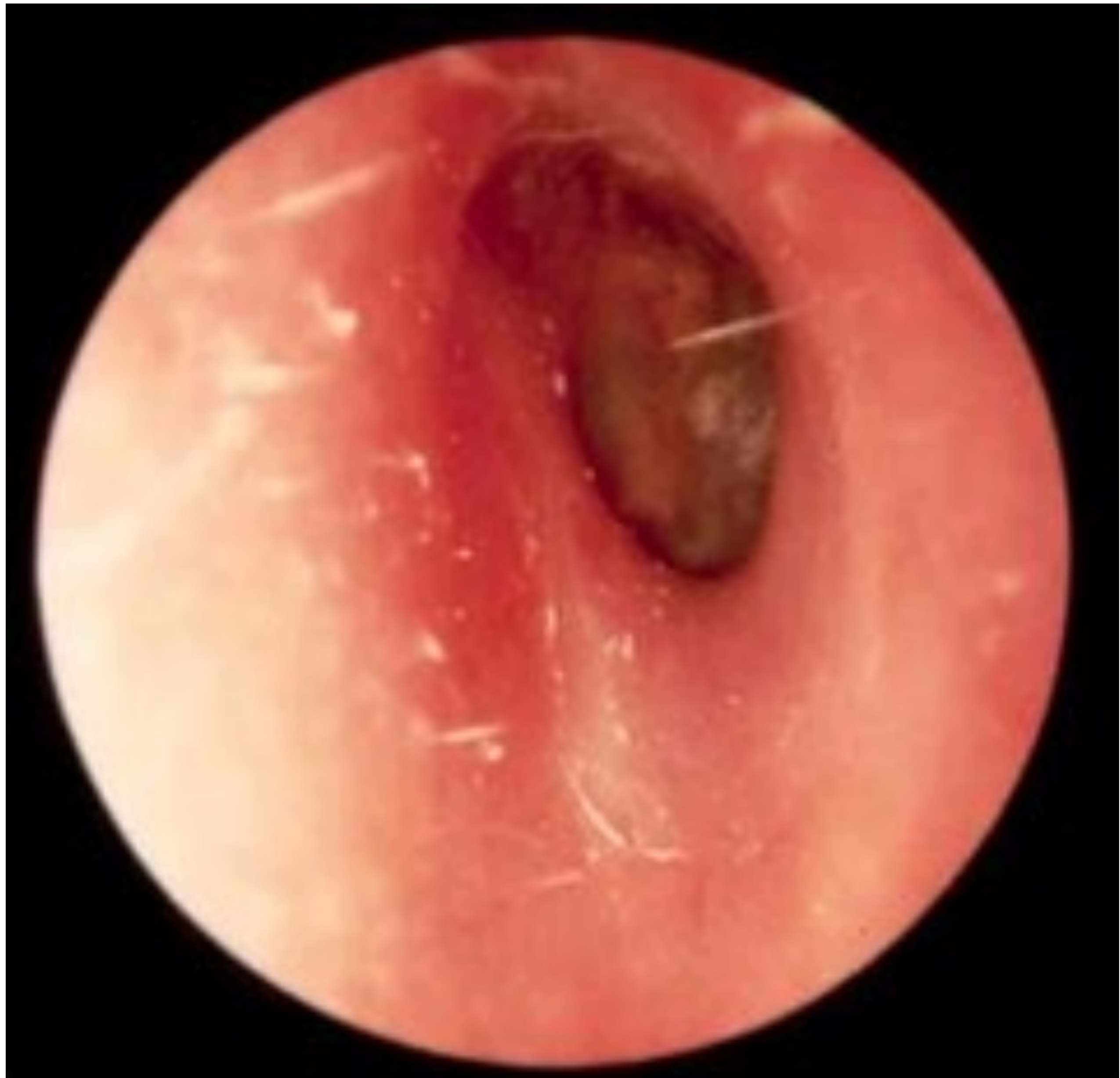
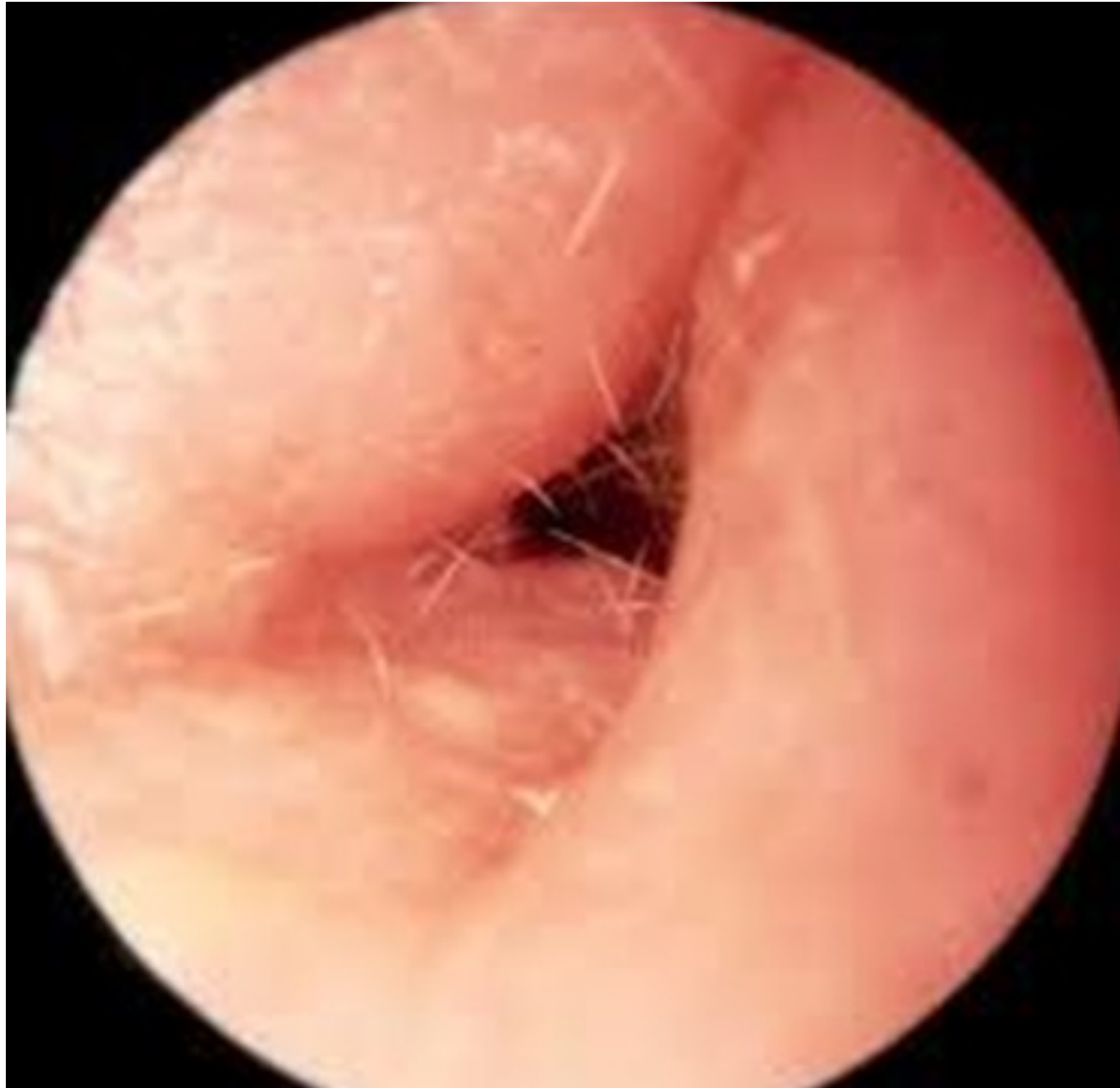
Otomize spray for

Otitis Externa







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- Otitis Externa is a condition that causes inflammation (redness and swelling) of the external ear canal.
- Symptoms can include ear pain, itchiness in the ear canal, pus of liquid discharge from the ear, some degree of temporary hearing loss. It is usually unilateral.
- Most are caused by bacteria but can also be caused by physical irritation (water/ cotton buds), fungal infections and allergies.

Inclusion criteria

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- Patients with otitis externa
- Patients aged 16 years and over
- Patient must be present at consultation
- Clinical skills to assess

Exclusions

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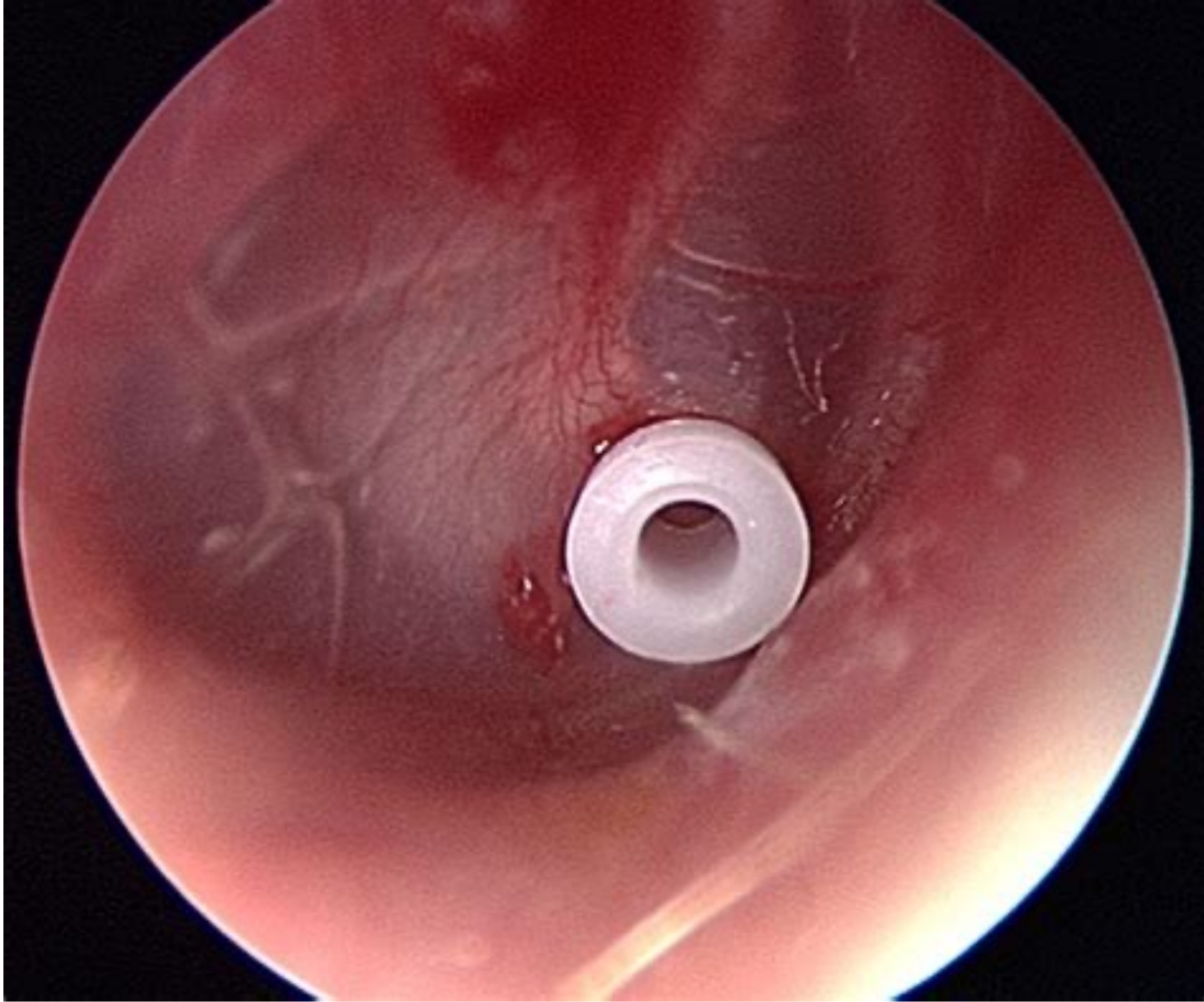
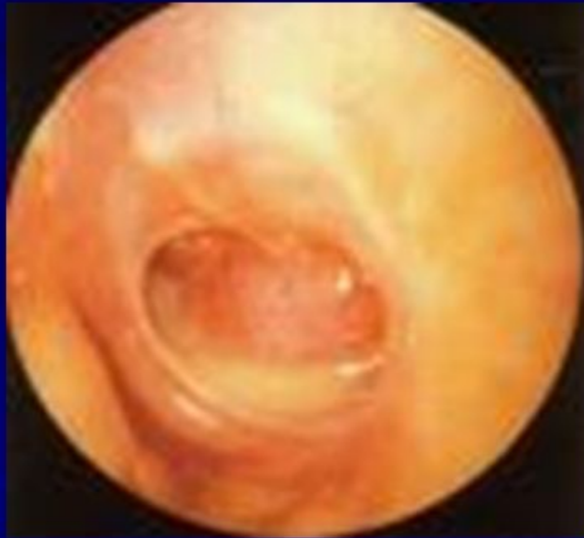
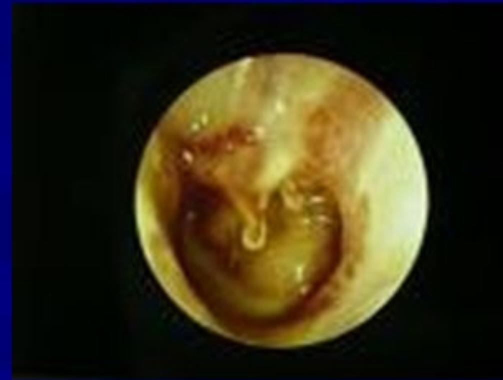
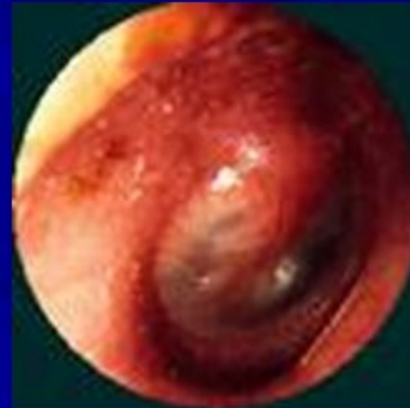
- Hypersensitivity to acetic acid, dexamethasone, neomycin or any other constituent of the product.
- Pregnancy or breast feeding
- Hepatic impairment
- Renal impairment
- Age under 16
- Previous treatment with otomize within the last 28 days
- Any recent (within 6 weeks) ear surgery
- Known or suspected perforated tympanic membrane (including where grommets in situ) either from history or examination



Chronic Otitis Media







Exclusions contd/…

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- Features of an alternative diagnosis such as chronic alternate diagnosis such as chronic otitis media -HISTORY
- Previous perforation of tympanic membrane
- Pre-existing use of topical antimicrobials/steroids for the same infection for 7 days with no improvement
- Systemically unwell with fever, vomiting, tinnitus or feeling of generally unwell.
- Severe ear pain
- Blocked inflamed ear canal (making it difficult to administer spray)
- Bone visible on examination, signs of cellulitis or abscess. Patients unable to use the spray correctly, e.g. due to physical or cognitive limitations

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- One spray into the affected ear(s) three times a day for no more 7 days
- Continue until 2 days after symptoms have disappeared

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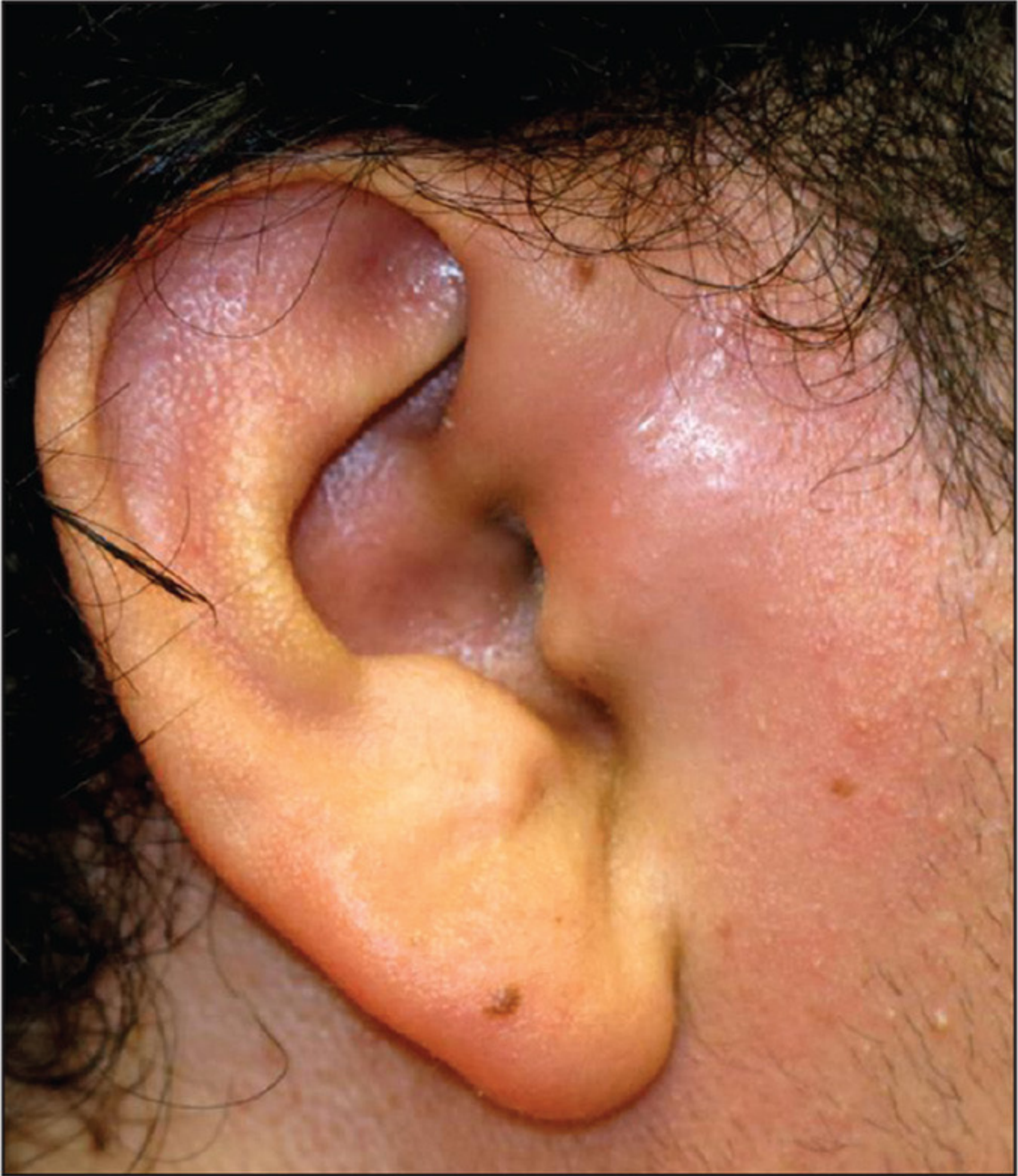
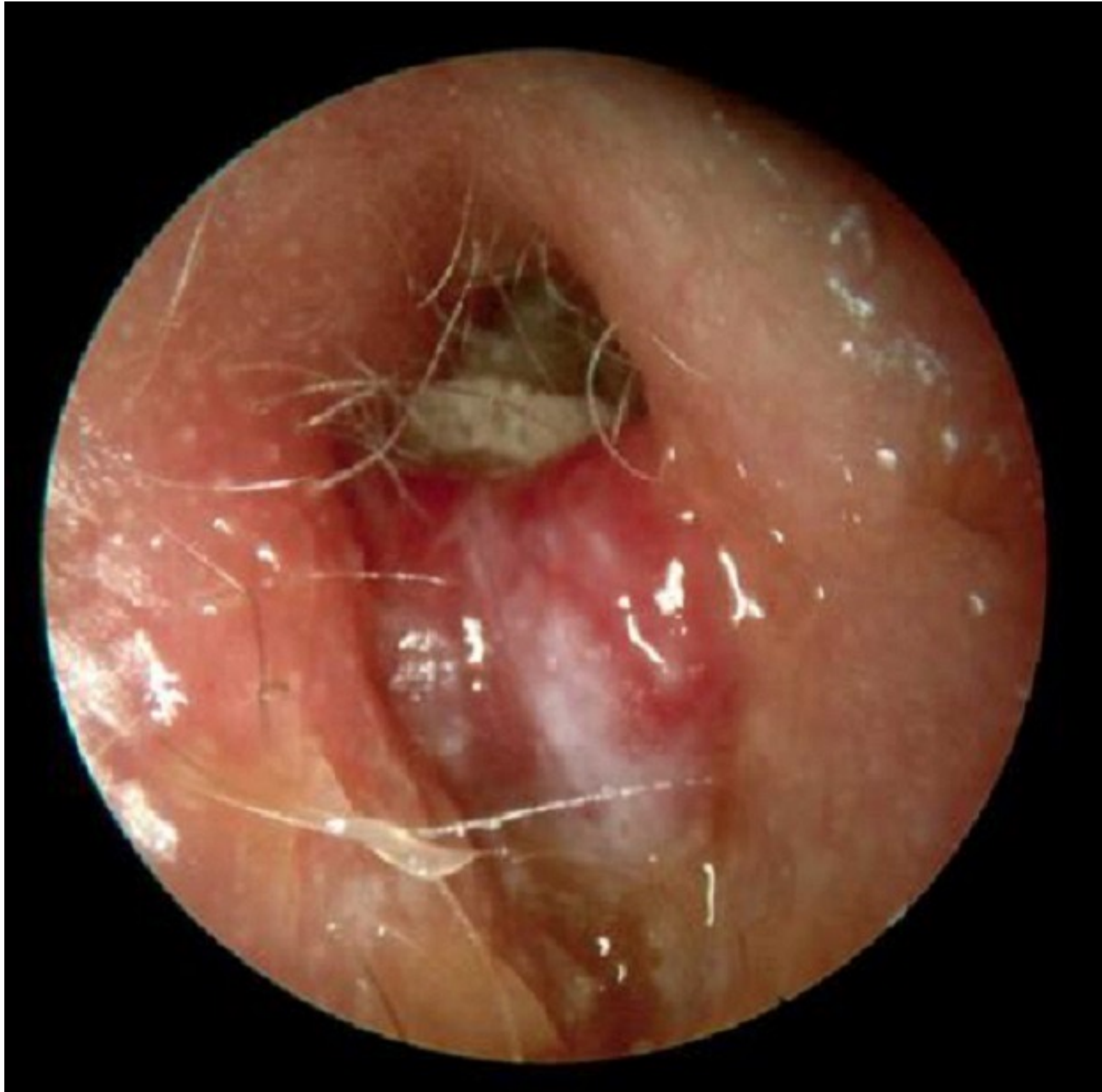
- If there is no improvement after 7 days, seek medical advice from GP. If any potential complications develop seek urgent medical referral.
- Complications of otitis externa:
  - Abscesses- increased pain and fever
  - Canal stenosis- more common with long term OE- reduced hearing
  - Perforated tympanic membrane- hearing loss, earache, ear discharge, tinnitus.
  - Cellulitis- surrounding skin becomes red , painful, hot and tender to touch. Other symptoms can include nausea, fever, feeling generally unwell (more common in immunocompromised).
  - Malignant Otitis Externa- infection spreads to bone surrounding ear, more common in adults, particularly over 60s and immunocompromised (including Diabetes). Symptoms include severe ear pain, headaches, exposed bone visible in ear canal and facial nerve palsy.





Penicillin/Clarithromycin for

Acute Sore Throat

Acute sore throat

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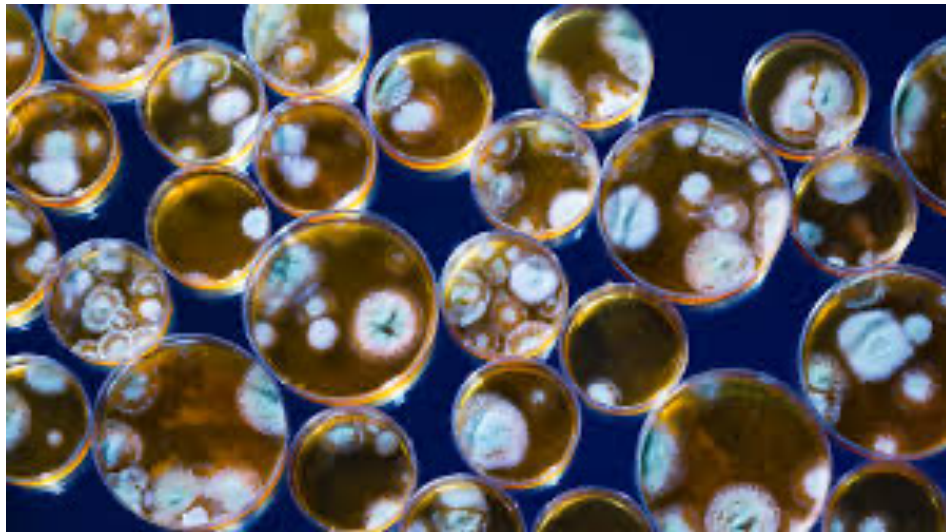
- Penicillin 500mg qds for 10 days
- Clarithromycin 500mg bd for 7 days



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- Adults, aged 16 years and over, with a FeverPain score of 4 or more.
- For patients with acute sore throat assess their symptoms using the FeverPain score
- Each scores 1 point
  - Fever in last 24 hours
  - Purulence on tonsils
  - Attended rapidly (defined as <3d from onset)
  - Severely inflamed tonsils
  - No cough or coryza

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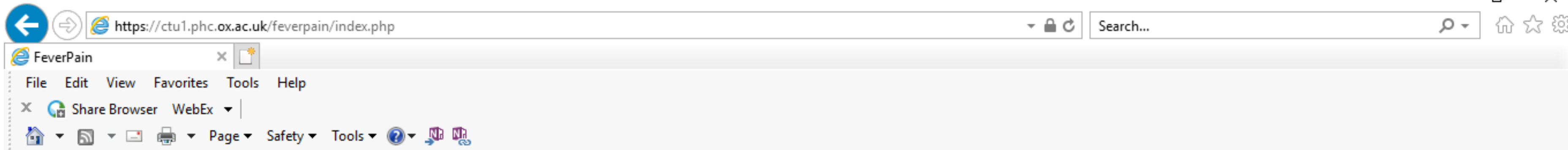

Hit Count: 130178

Fever PAIN Clinical Score

Background Information

Further guidance on the treatment of respiratory infection is available from the Health Protection Agency

How to create a desktop shortcut for this site

History	
Sore throat	None Mild Moderate Severe No answer
Cough or Cold symptoms	None Mild Moderate Severe *
Muscle aches	None Mild Moderate Severe No answer
History of Fever in last 24 hours	Yes No *
Onset of illness	0-3 days 4-7 days 7+ days *
Examination	
Cervical glands	None 1-2cm > 2cm No answer
Inflamed tonsils	None Mild Moderate Severe *
Pus on tonsils	Yes No *
Fever present Type in here the temperature and any other free text needed for the summary	

Display Score

All observations normal

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	Range	Patients reading	Within range
Respiration rate (per minute)	12-20		
Temperature (celsius)	36.1-38.0		If temperature is sole abnormal reading and is between 38-39 please discuss with GP
Systolic BP (mmHg)	111-219		
Pulse rate(bpm)	51-90		
Level of consciousness	Alert		

Normal throat

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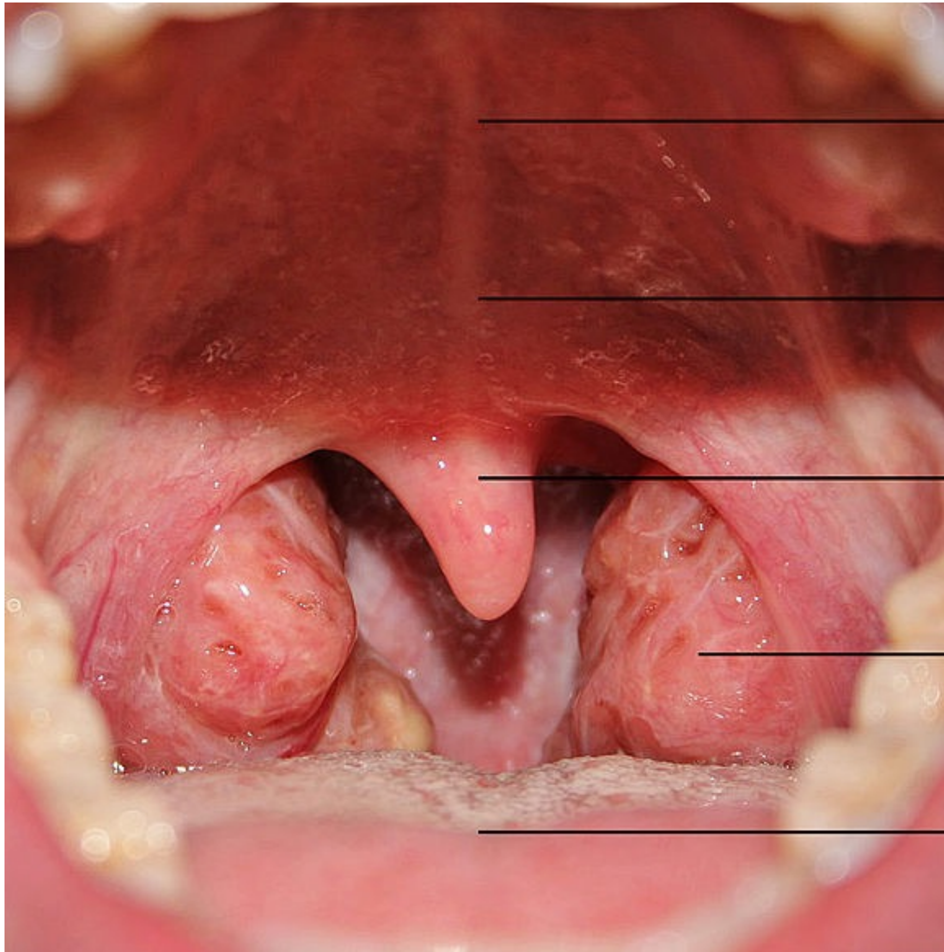

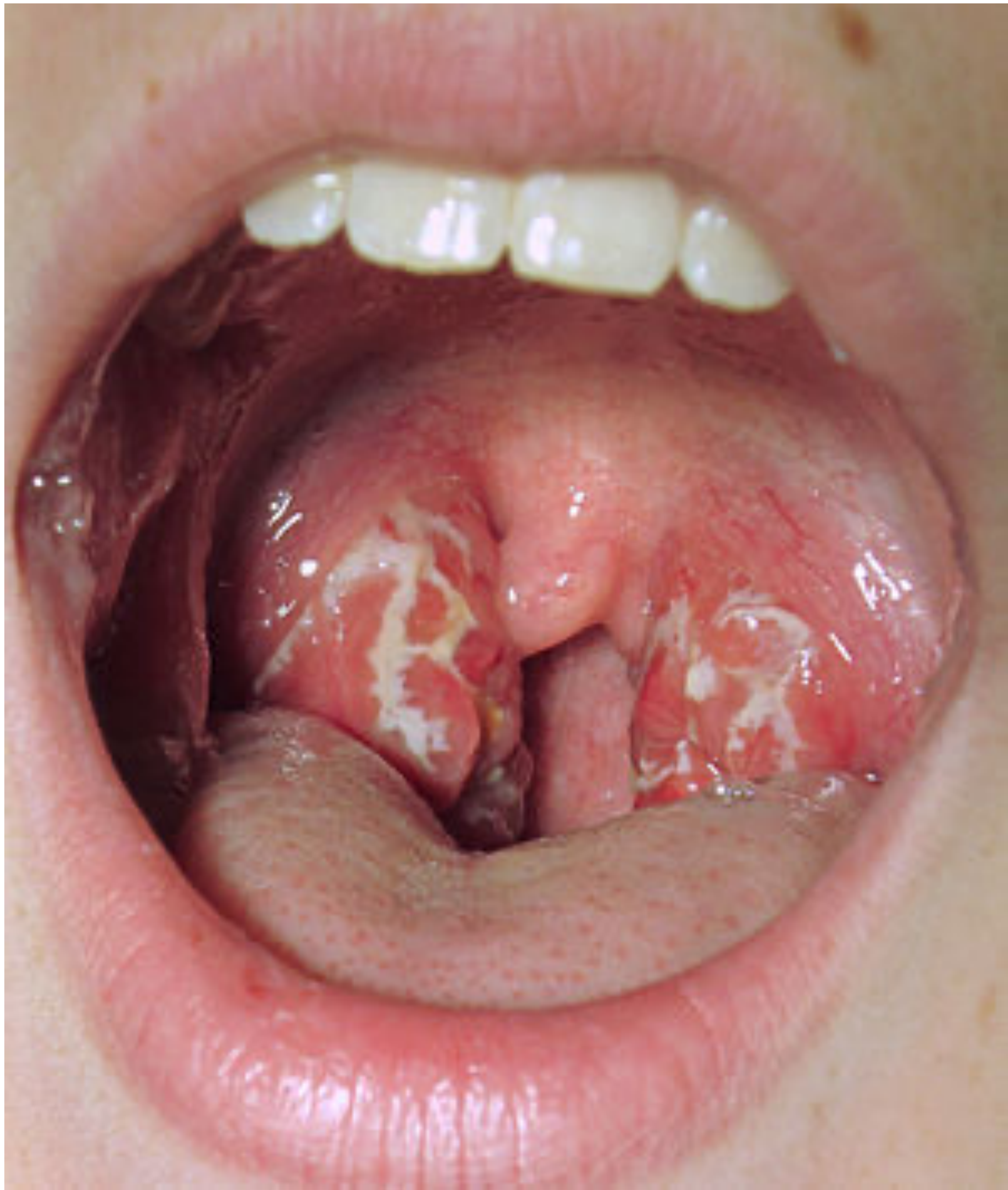

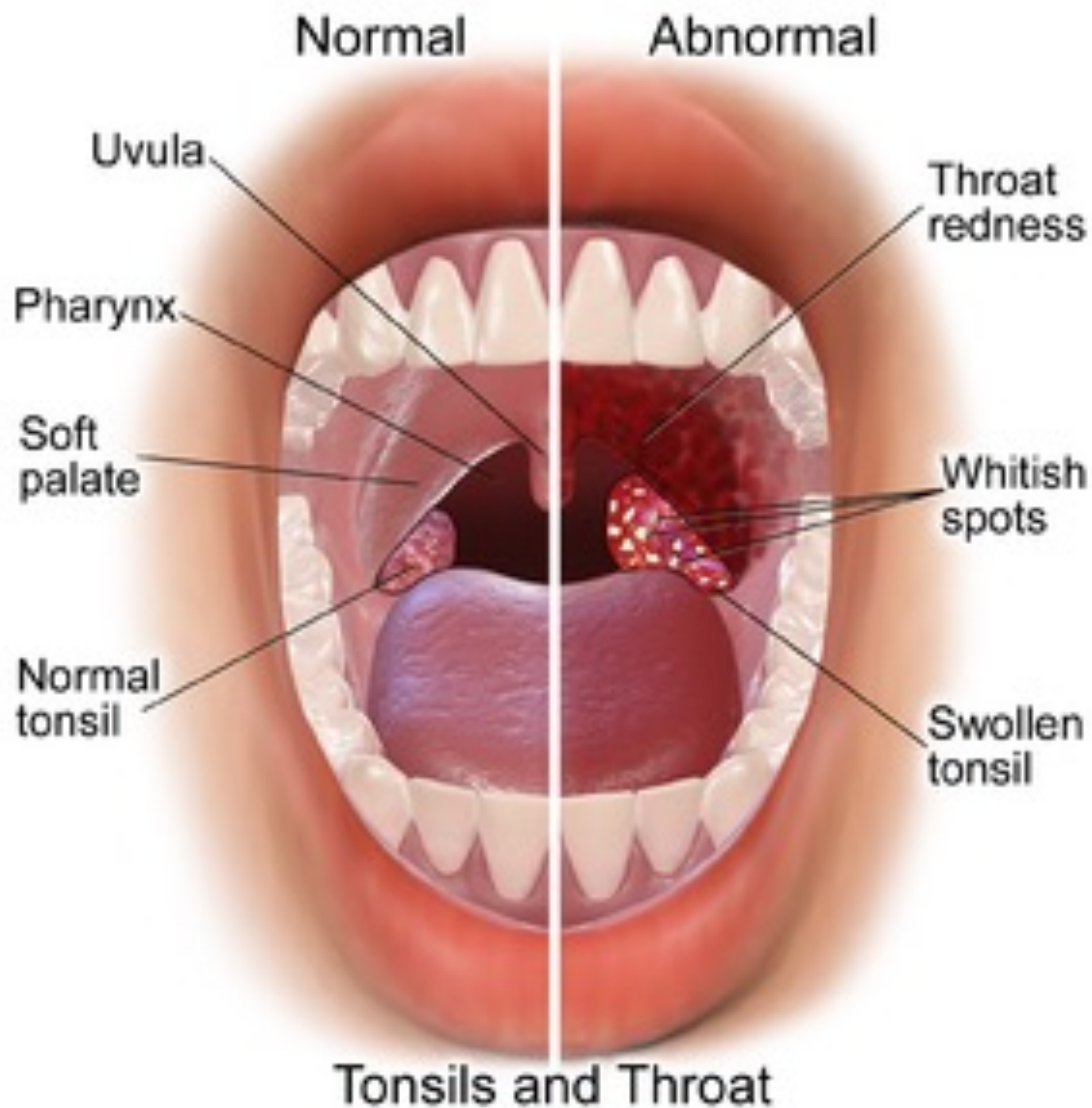
Normal
Abnormal
Uvula
Pharynx
Soft palate
Normal tonsil
Throat redness
Whitish spots
Swollen tonsil
Tonsils and Throat

- **FeverPain score 1**: Do not offer an antibiotic prescription. As well as the general advice, give advice about an antibiotic not being needed and seeking medical help if symptoms worsen rapidly or significantly, do not start to improve after 1 week, or the person becomes systemically very unwell.

- **FeverPain score 2-3** : Give advice regarding any worsening of symptoms to see GP, specifically if symptoms do not start to improve within 3 to 5 days or if they worsen rapidly or significantly at any time. Advise on the need to seek medical help if becomes systemically very unwell

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- FeverPain score of 4or 5: Consider an immediate antibiotic prescription, taking account of possible adverse effects, particularly diarrhoea and nausea.
- When an immediate antibiotic prescription is given, as well as the general advice, give advice about seeking medical help if symptoms worsen rapidly or significantly or the person becomes systemically very unwell.

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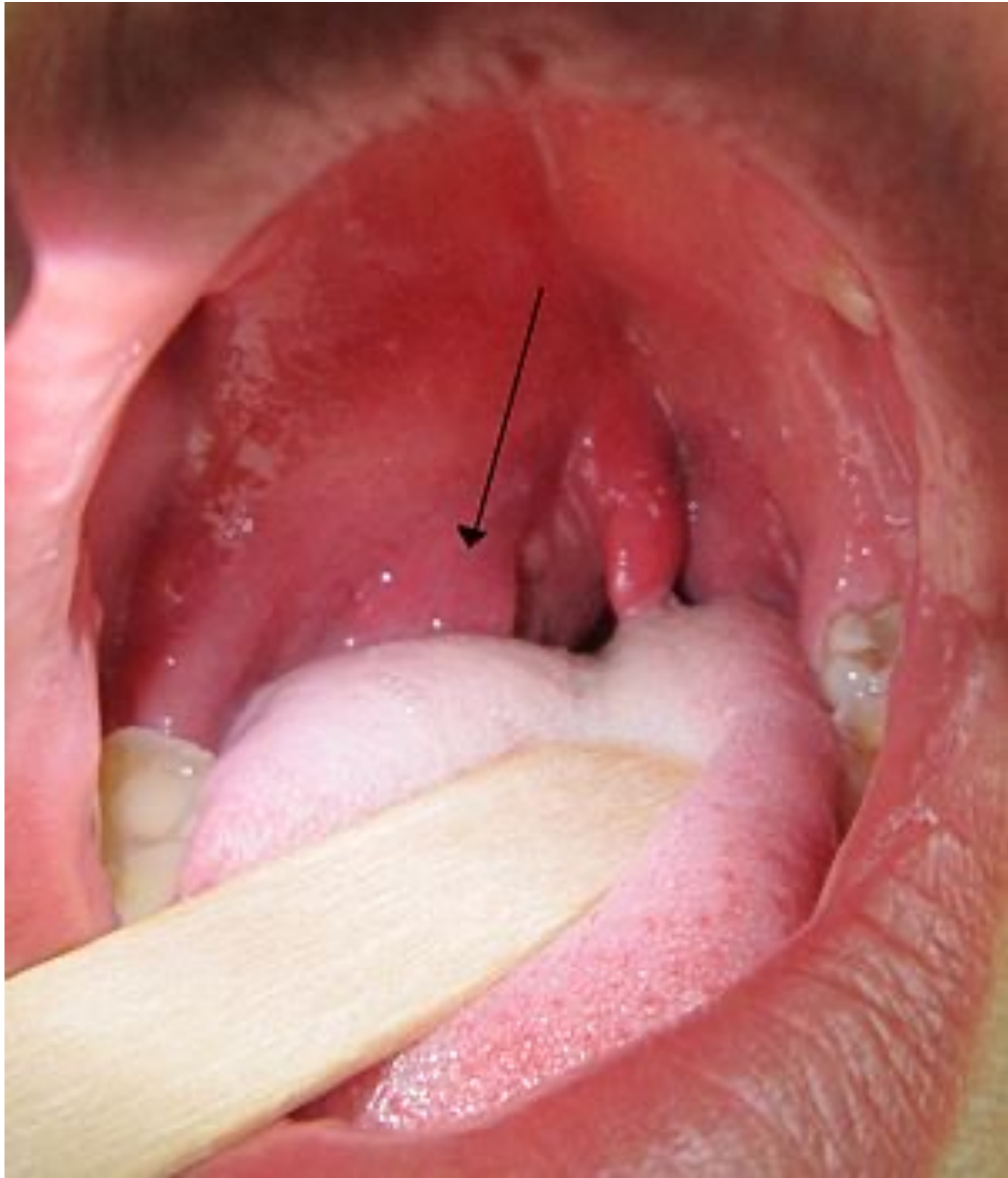
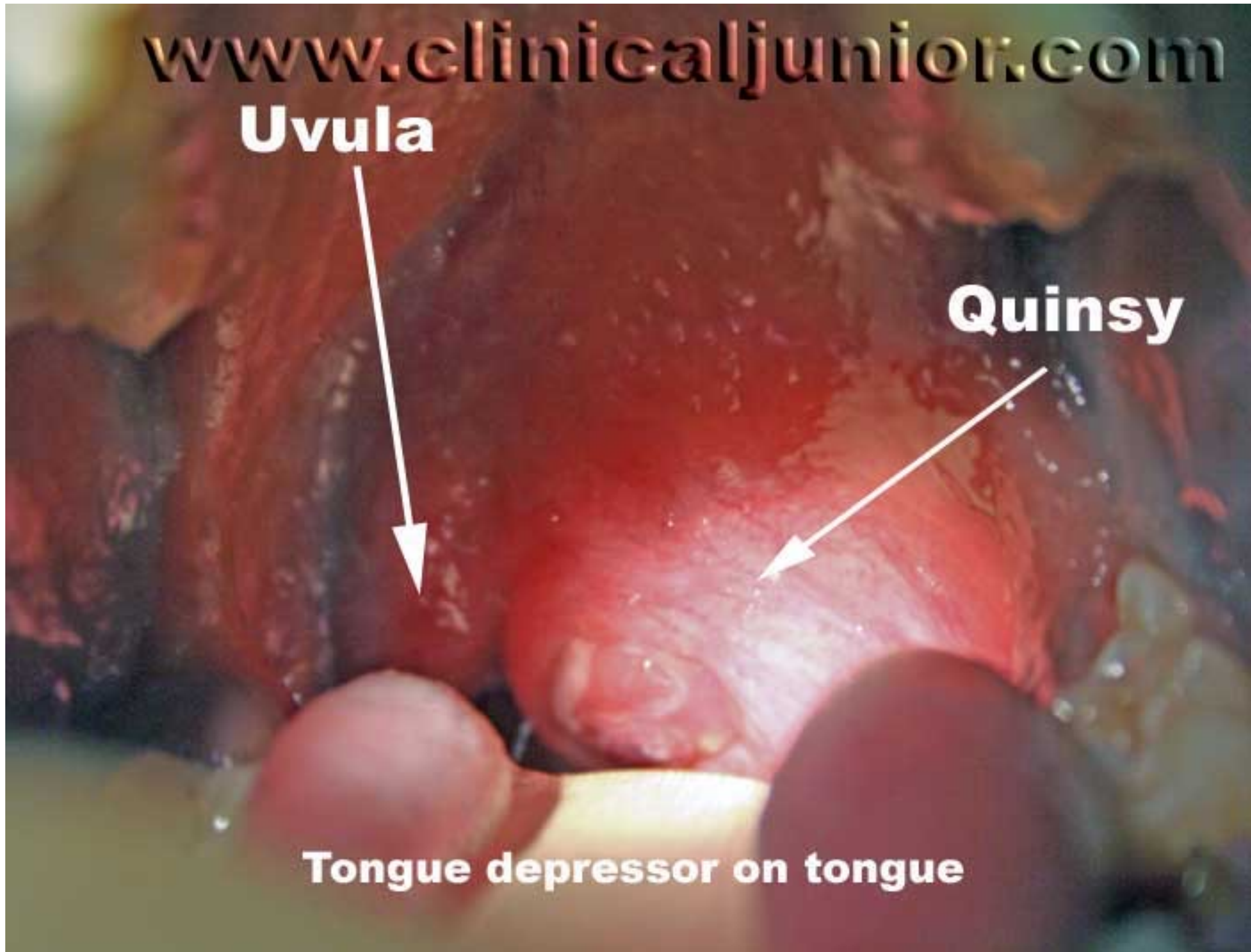
- Allergy to Penicillins (see Clarithromycin for Sore throats PGD)
- Observations not in normal range as per checklist
- If patients are systemically unwell, have features of a more serious illness or who are of high risk of complications they need referral to GP urgently.
- Refer people to hospital urgently if they have acute sore throat associated with any of the following:
- a severe systemic infection
- severe suppurative complications (such as quinsy)
- Previous antibiotic use for same condition within one month
- Pregnancy
- Breastfeeding
- Renal impairment
- Hepatic impairment




www.clinicaljunior.com
Uvula
Quinsy
Tongue depressor on tongue

Refer to GP if:

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- they are excluded
- If they had a FeverPain score of 2-3 and their symptoms have not started to improve after 3-5 days
- If they have a FeverPain score of 4-5 but the pharmacist has not issued an antibiotic for any reason
- Advise patients that they need medical review if their symptoms worsen rapidly or significantly, or if the person becomes very unwell.

Thank you