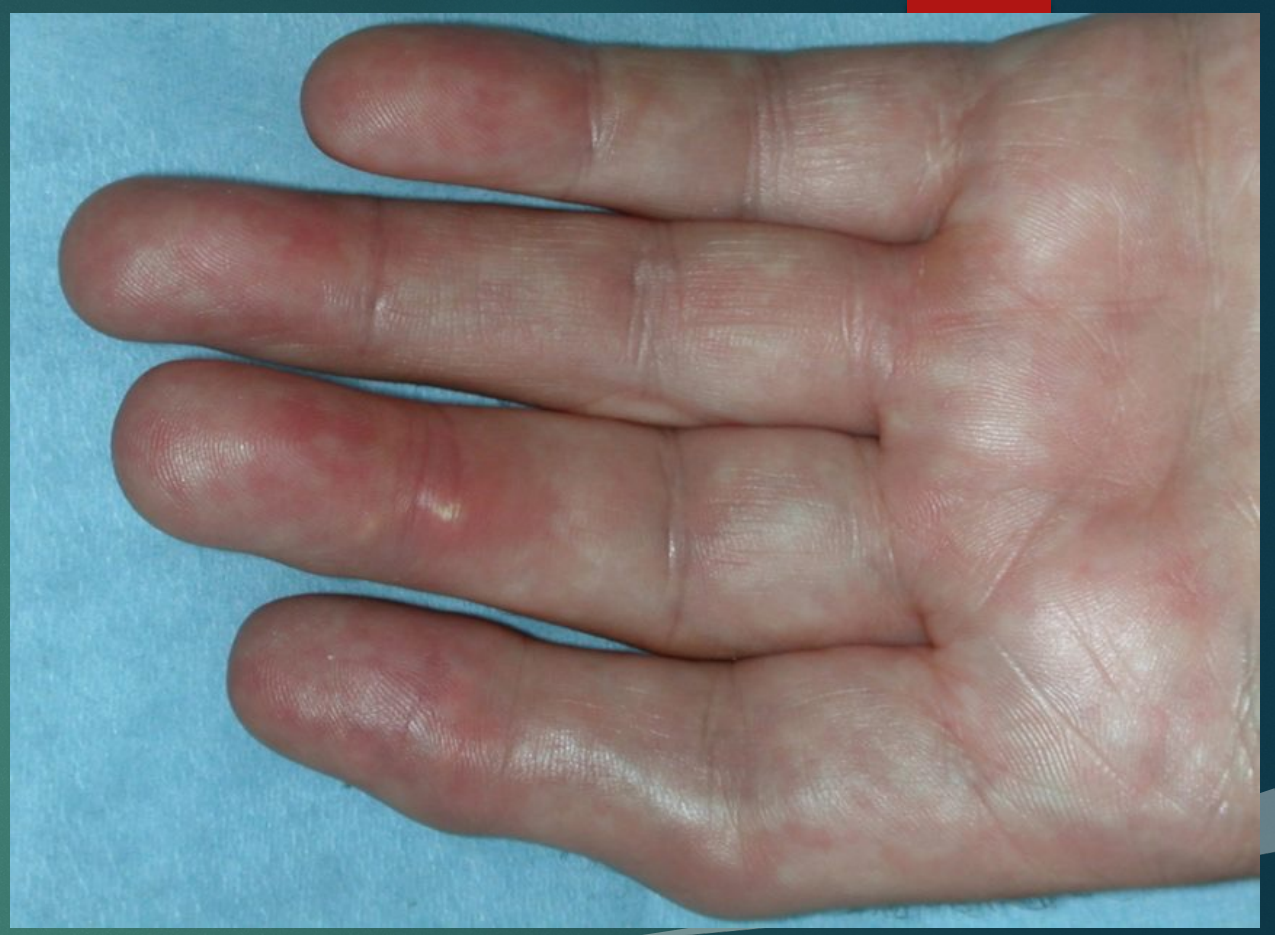


New Medicine Service

A FOCUS ON GOUT

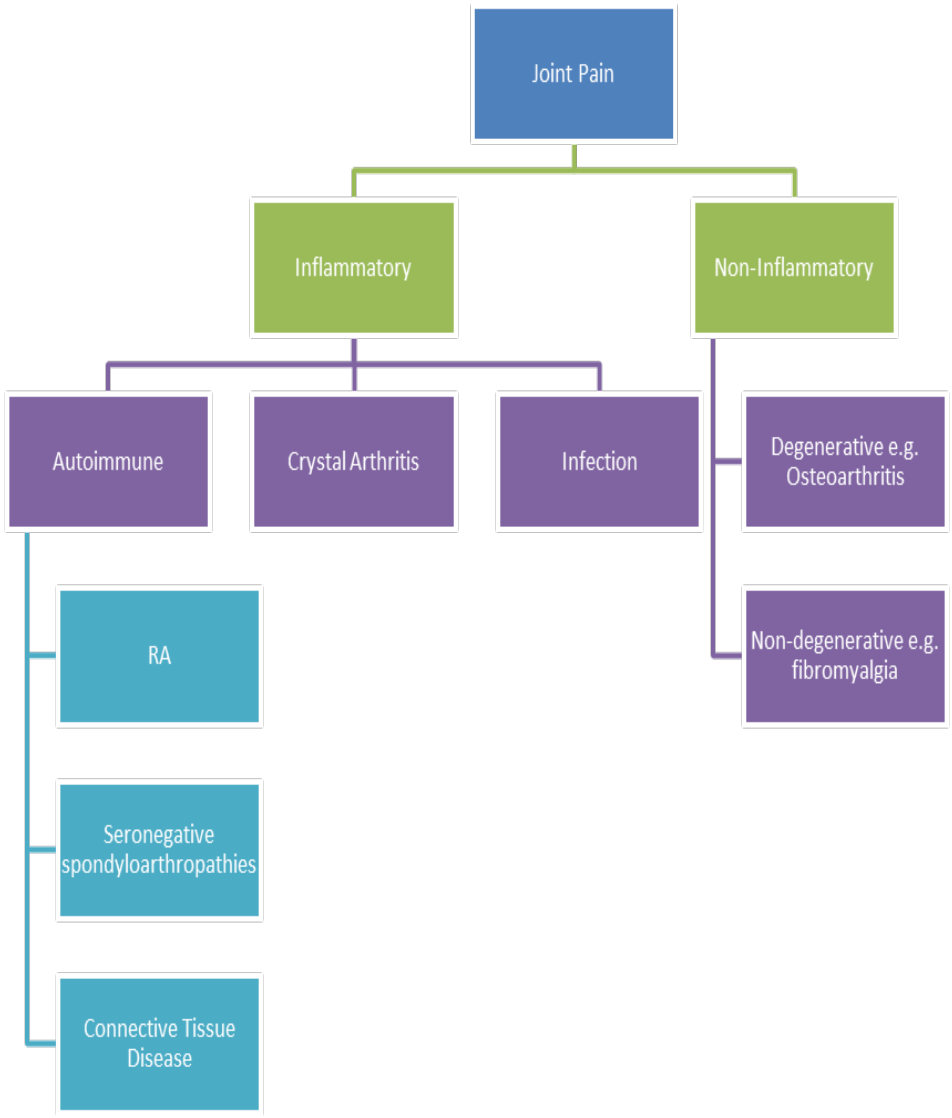
Learning objectives for this session

- Summary of the New Medicine Service
- Recap on the condition of gout
- Overall management of gout
- Key information on each medicine used in gout
- Main counselling points for your patients
- Clinical case study
- Further reading and signposting

NMS - Summary

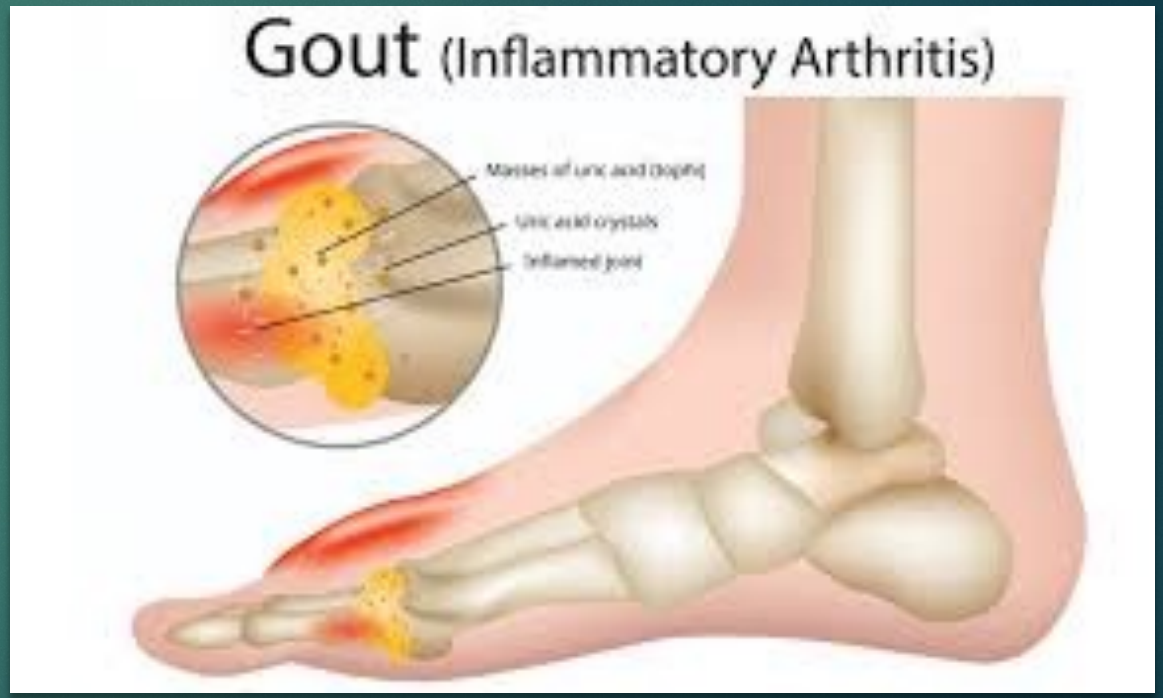
- **Patient consent and other data requirements**
- **Catch up NMS - between 1st September 2021 and 31st March 2022.**
- **Targets for payment**
  - All completed NMS provided by a contractor that fall below the 10% target will paid at £20 each;
  - Once a contractor reaches the 10% target all completed NMS (including those which fall below the 10% target) will be paid at £25 each;
  - Once a contractor reaches the 20% target all completed NMS (including those which fall below the 20% target) will be paid at £26 each;
  - Once a contractor reaches the 30% target all completed NMS (including those which fall below the 30% target) will be paid at £27 each;
  - Once a contractor reaches the 40% target all completed NMS (including those up to the maximum target) will be paid at £28 each.

The condition and clinical features



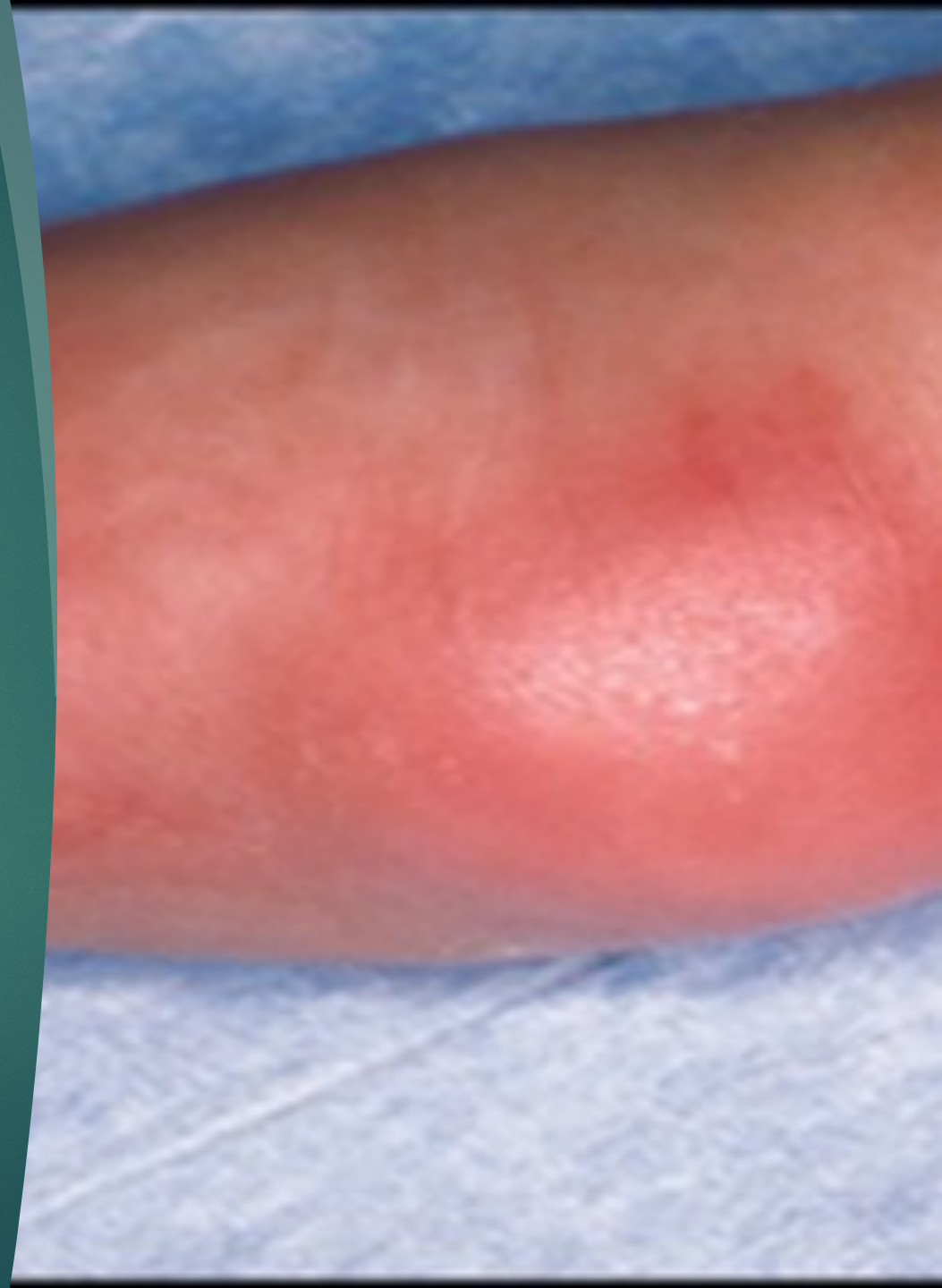
The condition

- *Acute sudden inflammation of the joint caused by high level of uric acid concentrations in the blood - Hyperuricaemia*
- Also known as crystal arthritis or inflammatory arthritis
- 2 main types of crystal involved
  - Monosoduim Urate (Gout) – only talking about this one today!
  - Calcium pyrophosphate (Pseudogout)



Clinical features

- Middle aged – older men, although can affect female
- Sudden onset
- Agonising pain
- Red, shiny joint - any joint, classically the big toe
- Tender
- In chronic gout: urate deposits (tophi) found in peripheries



Risk factors

Aggressive induction/cessation of (Allopurinol)	Increased intake of Alcohol/red meat/shellfish	Cell damage - Acute severe illness/ Trauma /
Reduced renal excretion - Dehydration	Age	Family history
Gender	High cell turnover - psoriasis	Use of Insulin therapy & diuretics

The management

- NICE Guidance for gout - https://cks.nice.org.uk/topics/gout/

- BNF https://bnf.nice.org.uk/treatment-summary/gout.html

Gout treatments	
Attacks	**Prevention**
Anti-inflammatory drugs	Allopurinol
Colchicine	Febuxostat
Steroids	Canakinumab
	Probenecid, Sulfinpyrazone, benzbromarone

The medicines – acute attack

Nonsteroidal anti-inflammatory drugs NSAIDs

Ibuprofen, Naproxen(750mg then 250mg every 8 hours, indomethacin (50mg TDS-QDS)

analgesic, antipyretic and, at higher doses, anti-inflammatory actions.

taken as soon as attack coming on

Take maximum dose as early as possible, and continue the treatment until 1-2 days after the attack has resolved

PPI – co-administration

Avoid in renal impairment

Aspirin is not indicated in gout

Consider paracetamol, with or without codeine

The medicines - acute attack

Colchicine

(µg) BD to QDS until symptoms are relieved. Do not exceed a total dose of 6mg per course. Course not to be repeated within three days.

Colchicine effective at reducing the inflammation caused by urate crystals.

taken as soon as an attack coming on

Colchicine can interact with several other drugs

Avoid taking colchicine if patient has chronic kidney disease.

Colchicine tablets can cause diarrhoea or stomach pains.

The medicines - acute attack

Steroids

taken as a short course of tablets, lasting a few days.

Oral -Prednisolone 20-40mg daily for 5 days

Intramuscular injection: (Off license use. One off deep IM into gluteal muscle) - Methylprednisolone 40-120mg or - Triamcinolone acetonide 40-80mg

Intra-articular injection: (Off license use. If single joint involvement only) - Methylprednisolone 10-80mg (small and large joints) - Hydrocortisone acetate 12.5- 25mg (small joints) - Triamcinolone acetonide 20-40mg (large joints)

The medicines - prevention

Allopurinol

first-line urate-lowering therapy

used long-term to help prevent flares

Start allopurinol 1-2 weeks after the acute attack has resolved

Start at 100mg once daily and titrate in 50-100mg increments every 4 week to achieve target Serum Uric Acid (SUA)

maintenance dose in mild conditions is 100mg-200mg daily, in moderately severe conditions 300mg-600mg daily and in severe conditions 700-900mg daily

The maximum dose of allopurinol for gout prophylaxis is 900mg daily.

Lower starting dose for in elderly patients, those with frequent attacks, those with renal and hepatic impairment

Co-prescribing for prophylactic use

Rashes are a common side effect

The medicines - prevention

Febuxostat

used as an alternative when allopurinol is contra-indicated or not tolerated.

MHRA/CHM advice: Serious hypersensitivity reactions - There have been rare but serious reports of hypersensitivity reactions, including Stevens-Johnson syndrome and acute anaphylactic shock

Common side effects include: Diarrhoea; gout aggravated headache; hepatic disorders; nausea; oedema; skin reactions

The medicines - prevention

Uricosuric drugs

Probenecid, Sulfinpyrazone, benzbromarone

Benzbromarone increases urinary excretion of uric acid

can be used in patients with mild-to-moderate renal dysfunction.

hepatic toxicity

Probenecid can be started by 250 mg twice daily for 1 week and may increase to a maximum of 2 g/day.

avoided use in patients with eGFR <30 mL/min

Sulfinpyrazone is started at a dose of 50 mg twice daily, with increments

The maximum effective dose of sulfinpyrazone is 800 mg/day,

Avoid be used in persons with CKD or a history of uric acid kidney stones

The medicines - prevention

Canakinumab

Used in patients whose condition has not responded adequately to treatment with NSAIDs or colchicine

or in those with contra-indications or intolerances to them,

and in whom repeated courses of corticosteroids are inappropriate

Not seen in community pharmacy

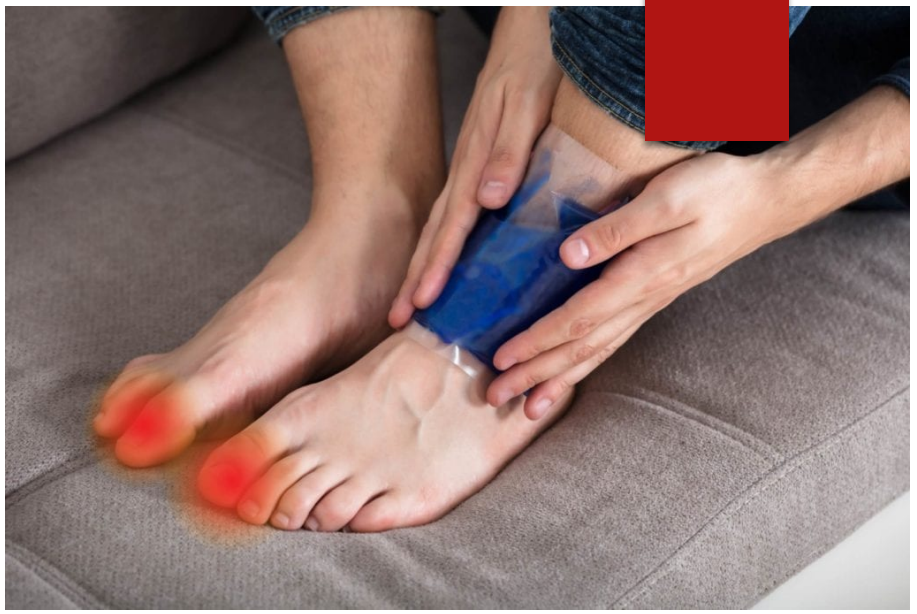
Side effects

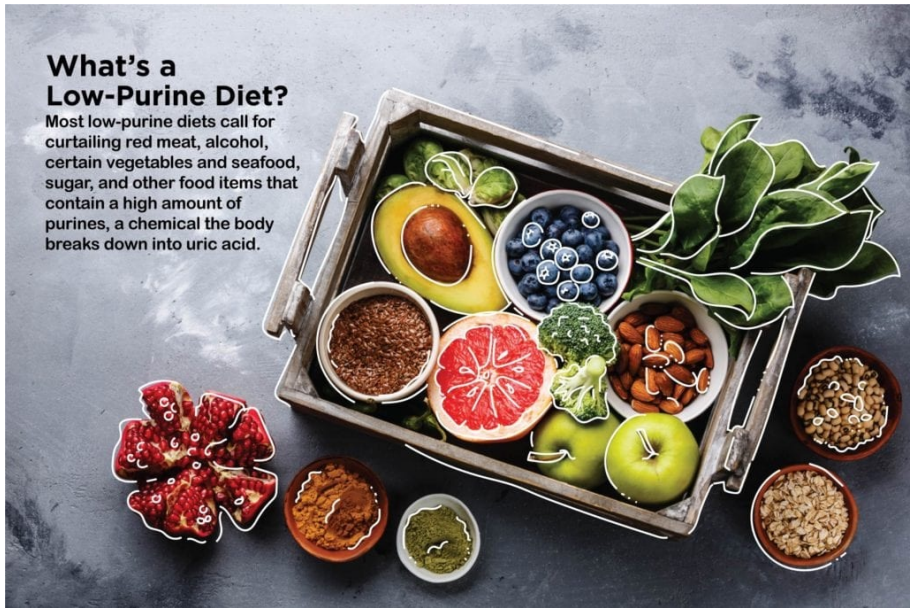
Abdominal pain upper; arthralgia; asthenia; dizziness; increased risk of infection; leucopenia; neutropenia; pain; proteinuria; vertigo

Gastrooesophageal reflux disease

Self-help counselling points

- Keep the area cool
- Rest and elevate the affected joint
- Avoid trauma to the affected joint
- Keep the joint exposed and in a cool environment.
- Use a bed cage and ice packs.
- Avoid or limit alcohol
- Drink plenty of water
- Lose excess weight or maintain a healthy weight
- Consider taking vitamin c supplements
- Avoid excessive consumption of foods rich in purines (such as liver, kidneys, and seafood), limit consumption of sugary drinks and snacks
- Avoid drug-induced gout: diuretics (Inc. thiazide), B-blockers, ACE inhibitors and non-losartan angiotensin II receptor blockers increase serum urate





Clinical case study

A 58-year-old male presents to the pharmacy to collect a prescription. He tells you of his rapid onset of pain and swelling in his right toe. The patient reported that he had two similar previous episodes with the same symptoms lasting four to five days and that the GP says he has Gout. His prescription is for Naproxen, Colchicine and Allopurinol. The patient consents to the NMS service.

What side-effects will you discuss with the patient?

What self-help will you advise?

You contact the patient after one week and he tells you that he has started the allopurinol and is feeling really sick

How do you respond?

Two weeks later, at the next NMS session, he tells you that a red/purple rash has appeared that really looks like a blister

What do you recommend?

Further reading and signposting

- CPPE – background reading for NMS in general
- Versus arthritis - https://www.versusarthritis.org/about-arthri
- Self-help group - http://www.ukgoutsociety.org/get-help/tis/conditions/gout/
- UK Gout society http://www.ukgoutsociety.org/PDFs/2009FinalGoutBooklet.pdf
- Patient information for Febuxostat https://www.nice.org.uk/guidance/ta164/resources/febuxostat-for-hyperuricaemia-in-people-with-gout-pdf-376335037

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- 9. eMC Summary of Product Characteristics. Adenuric 80mg film coated tablets.

Clinical case study - answers

A 58 year-old male presents to the pharmacy to collect a prescription. He tells you of his rapid onset of pain and swelling in his right toe. The patient reported that he had two similar previous episodes with the same symptoms lasting four to five days and that the GP says he has Gout. His prescription is for Naproxen, Colchicine and Allopurinol. The patient consents to the NMS service.

What side-effects will you discuss with the patient? Think about GI problems with all three of these drugs but also remember the toxicity with colchicine due to its narrow therapeutic index, such as nausea, vomiting and server abdominal pains. You may also want to think about the side effect of steroids such as weight gain, indigestion, sleep problems and sweating

What self-help will you advise? Keep the area cool, rest and elevate the affected joint. Keep the joint exposed and in a cool environment and use ice packs. Avoid or limit alcohol but drink plenty of water. Avoid excessive consumption of foods rich in purines

You contact the patient after one week and he tells you that he has started the allopurinol and is feeling really sick

How do you respond? Check they are not taking other drugs that may increase the levels of allopurinol such as thiazides, amoxicillin. Nausea and vomiting is a uncommon problem with this drug and will subside. Ensure the patient drinks water to prevent dehydration

Two weeks later, at the next NMS session, he tells you that a red/purple rash has appeared that really looks like a blister

What do you recommend? This could be Stevens-Johnson Syndrome from allopurinol. This can affect skin, eyes, genitals and mucous membrane. The patient may also have flu-like symptoms. The blister will start to peel off when the affect skin dies off. The patient should stop the medication and see the prescriber as soon as possible