

Juvenile Idiopathic Arthritis

- ❖ Onset <16 years of age
- ❖ Autoimmune disorder
- ❖ Persistent joint swelling of duration over 6 weeks
- ❖ There are 6 subtypes of JIA – [click here](#)
- ❖ Normal inflammatory markers do not exclude a diagnosis of JIA
- ❖ Investigations:
 - Blood tests: FBC, LFT, ESR, blood film, ANA, RF
 - X-ray
 - Ultrasound if swelling present
 - MRI – particularly in enthesitis (inflammation where a tendon or ligament attaches to a bone) related arthritis
- ❖ All patients with new diagnosis of JIA should have screening for uveitis within 10 weeks
- ❖ Management:
 - Naproxen with PPI cover
 - Steroids – oral prednisolone (multiple joints); intra-articular joint injection; IV methylprednisolone if unwell
 - Systemic treatment start with methotrexate (IM or oral)
 - If not working after 3 months escalate to [biologic](#)
 - PHYSIOTHERAPY

Raynaud's

- Peripheries, particularly the fingers and toes change colour when exposed to the cold. It can also affect the hands, feet, ears, nose, lips, and nipples.
- Raynaud's symptoms include:
 - Colour change in the extremities from white -> blue -> red
 - Can be associated with pain and discomfort, particularly as circulation returns
 - Cold and numbness in affected area
- Around 1 in 10 people suffer from Raynaud's
- Common in teenagers, often presenting around puberty and improves as they get older
- Less common in babies and young children and therefore should consider investigation for underlying cause
- The majority of people have Primary Raynaud's i.e. no underlying cause
- Secondary Raynaud's is caused by another condition e.g. scleroderma or lupus. It is generally more severe.

Management:

- Keep warm – hand warmers, gloves, thick socks
- Exercise
- Stop smoking
- Relaxation techniques – exacerbated by stress & anxiety
- Nifedipine can be considered if affecting lifestyle & not helped by conservative measures

Useful websites:

- <https://www.sruk.co.uk/>
- <https://cks.nice.org.uk/topics/raynauds-phenomenon/>
- <https://www.versusarthritis.org/about-arthritis/conditions/raynauds-phenomenon/>

Picture Quiz

Paediatric rheumatology and the skin:

[Click here](#)

Further Resources and Information:

- <https://jia.org.uk/resource/managing-jia-in-school/>
- https://www.rheumatology.org.uk/Portals/0/Documents/Guidelines/Paediatric%20guidelines/Guidance_management_symptomatic_hypermobility_CYP_June_2019.pdf?ver=2019-06-24-134243-607
- <https://www.versusarthritis.org/about-arthritis/young-people/>

HYPERMOBILITY – paediatric physiotherapist Gabriela Korach

- Hypermobility is a description of joint movement. Hyper means 'more' and mobility means 'movement'. Ligaments offer stability to joints and in hypermobility, ligaments are lax and joints have more flexibility. It is not an illness or a disease, just the way someone is put together. It is considered a normal finding by medical professionals.
- Most children are flexible and some more so than others. The majority of children will become less supple as they get older but a small percentage will remain very flexible. This is more common if their parents are still very flexible.
- Most common parental concerns include: taking longer to achieve crawling, walking and running and may be more likely to bottom shuffle. Other frequent findings are: clumsiness and frequent falls, flat feet, clicky joints, tiredness, reluctance to walk longer distances, pain, difficulty with handwriting, holding a knife and fork and dressing.
- Many children who are hypermobile experience no symptoms or difficulties and being hypermobile is beneficial in a lot of sports.
- It is not fully understood why some children have more symptoms than others and it is not necessarily related to the degree of hypermobility (Leone et al, 2009). However it is believed that these problems are related to poor muscle strength, poor muscle stamina and poor control of joint movement, not the hypermobility itself.

Physiotherapy role:

As the symptoms are understood to be related to weaker muscles and that the joints may be less stable, muscles need to work harder and therefore it is particularly important to focus on being healthy, strong and fit. The stronger and fitter a child is, the better for their hypermobility and general well being.

Ensure a child does not get overweight as this may stress muscles and joints more.

Encourage normal everyday activities and play, e.g. swimming cycling, play parks, PE, dance.

If the child is having problems with activities of daily living, consider referral to an Occupational Therapist.

Pacing: If muscle pain after exercise is a problem, a child should not stop being active but pacing activities may help. Pacing means to gradually increase an activity in order to achieve a goal. Don't do too much activity on one day but spread it throughout the week and focus on building more strength and fitness.

Practice: hypermobile children need to build their muscle strength, which takes time and most importantly, practice.

Pain management: Aches and pains associated with hypermobility are usually a result of muscle fatigue, not damage or injury. A warm bath or a hot water bottle may help. Pain killers are not usually effective. Try not to focus on pain and distract.

Footwear: All children benefit from supportive footwear, especially if they have flat feet.

When you are buying shoes look for the following: shoes which are stiff around the heel, a sturdy sole to act as a shock absorber, soft uppers, preferably with laces or buckles, that support the whole foot, e.g. boots that fasten with laces