Exercise in Juvenile Idiopathic Arthritis (JIA)

This leaflet is aimed at young individuals with JIA and their parents/guardians.

What is JIA?

Juvenile arthritis is a condition that affects individuals who are 16 years or younger. Arthritis means there is inflammation inside the joint which can cause swelling, warmth and reduced range of movement.

Why is exercise important?

Regular exercise is important in young people with JIA and improves well-being. Exercising helps to build stamina (being able to ‘keep going’) and strengthen weakened muscles resulting in improved physical function and increased self-esteem. Of course, maintaining fitness is important for everyone’s general health.

During a flare-up of JIA

During a period of increased inflammation at the joints, gentle exercise will help young people to get swollen and painful joints moving. This will aid in decreasing stiffness at the joints and will keep young people active. Weight-bearing exercise is important in the inflammatory phase to maintain bone density. High impact exercise such as contact sports, athletics and trampolining should be avoided during a flare-up. Swimming, cycling and walking are useful ways of increasing cardiovascular fitness and maintaining joint movement without putting excess stress on inflamed joints.

Exercise at school/general fitness

Young people should be encouraged to participate in Physical Education (PE) to their own tolerance. Outside of school, they should maintain fitness levels in an activity that is enjoyable. Contact sports do not routinely have to be restricted. We aim for the young person with arthritis to get back to all the activities they enjoy.

However, the paediatric rheumatology team will advise when they should be avoided, for example during an acute flare-up. The paediatric rheumatology team can provide PE teachers with guidance on the most appropriate activities that people with JIA can participate in.
Young people should remain active around school; however, they may need more time when travelling between lessons or around the school environment. This can be discussed with the head of year.

**Types of beneficial exercise:**
There are different types of exercise that can be completed in individuals with juvenile idiopathic arthritis:

**Active ranges of movement exercises:** involve the individual moving their own joints within a comfortable range which can maintain mobility.

**Passive exercises:** involve a parent/guardian moving an individual's joint. This type of exercises is useful in acute flares as they allow the young person to maintain a comfortable joint range and alleviates muscle spasm.

**Strengthening exercises**
Muscles around inflamed joints can become wasted which can lead to difficulties with walking and overall body deconditioning. Muscle strengthening may not be possible until the inflammation is under control (following a steroid joint injection or when the child’s medication starts working). The young person’s physiotherapist will advise on the best strengthening exercises to target the weakened muscles. These are best done for short times at least once, preferably twice a day. Try to fit them into the young person’s daily routine such as before or after breakfast. Exercise charts can be useful to keep a daily record of when the young person has completed his/her exercises, while strategies such as setting a reminder in a phone can motivate individuals to complete their exercises.

**Cardiovascular exercise**
Children and young people should be encouraged to take part in cardiovascular activities (activities that raise the heart rate and make you breathless) within the confines of discomfort, but not so that it causes too much pain. This type of exercise will help to maintain fitness, functional strength and independence. Swimming, biking and scootering are all forms of cardiovascular exercise which can be done when joints are painful. These activities can be completed for 30 minutes a day to help keep young people strong.

**Hydrotherapy**
Hydrotherapy is exercise in a warm pool to relieve pain and promote physical well-being through exercise and relaxation. It can also maintain cardiovascular stamina and improve muscle strength and range of movement. The paediatric rheumatology physiotherapist will arrange treatment sessions if appropriate.
Further Information

Please if you have any further enquiries, contact the paediatric rheumatology physiotherapists on 01223 216633 (physiotherapy outpatients)

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For advice and support in quitting, contact your GP or the free NHS stop smoking helpline on 0800 169 0 169.

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patient.info@addenbrookes.nhs.uk.
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Document history
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Contact number 01223 216633
Publish/Review date December 2017/December 2020
File name Exercise_in_juvenile_idiopathic_arthritis.doc
Version number/Ref 1/100589