

## **Top Tips for Knee Pain**

- 1. Knee pain is a common symptom at all ages, and is also commonly seen in adolescent girls going through puberty. Inflammatory pain is usually associated with swelling and morning stiffness or gelling after rest. Mechanical pain classically worsens with activity and is marked at the end of the day.
- 2. Remember that hip disease can present with knee pain, and should be suspected if the knee examination appears normal, in the context of limp, or if pain is ill-defined.
- 3. Severe or refractory pain, especially with night pain or red flag symptoms, warrants urgent referral to orthopaedics. Radiographs should include the long bones above and below the knee to help exclude tumour or infection but further imaging may be required.
- 4. Normal variants (knock-knees and bow-legs) do not usually cause knee pain; consider other causes. Knee pain can be more common at times of growth, and can be associated with hypermobility, flat feet and genu valgum.
- 5. A single swollen painful knee is the most common presentation of Juvenile Idiopathic Arthritis (JIA) but there is a wide differential including trauma, infection, rheumatic fever, haemarthrosis or tumour.
- 6. Enthesitis around the knee is a feature of inflammatory arthritis (enthesitis related arthritis) and tends to occur around the patella ('3,6,9 o'clock' positions).
- 7. A sudden onset of knee pain with a 'pop' and rapidly developing effusion suggests internal injury such as anterior cruciate ligament rupture / meniscal tear and may associate with haemarthrosis.
- 8. Anterior knee pain is a common cause of activity related pain, often associated with growth and muscle imbalance hamstring tightness and is more commonly observed in athletic and / or hypermobile teenagers. Chondromalacia patellae is common in adolescent girls who may have knock-knees or flat feet, but this specific condition can only be confirmed by radiograph. Treatment focuses on muscle strengthening, stretches and may need to address foot posture and footwear.
- 9. Osteochondritis dissecans is observed in adolescent boys, often with mechanical pain and may associate with locking or giving way. There is tenderness over the femoral condyle.
- 10. Patella tendonitis, or 'jumpers' knee', often occurs during a growth spurt and causes anterior knee pain, which is worse with activity. Osgood-Schlatter's disease is more common in active adolescents (e.g., football, soccer, netball) with running and jumping. A period of rest or reduced activity will often resolve symptoms. Sinding-Larsen Johansson syndrome refers to pain and tenderness at the insertion of the patella tendon onto the inferior patella.

These materials maybe used, reproduced and distributed without permission. If you do use them, please acknowledge PMM - www.pmmonline.org - as the source. Thank you