Orthopaedic problems of the lower limb in children - referral guidance for common problems

SETTING Primary and secondary care

FOR STAFF GPs, Health Visitors, Secondary Care Paediatricians

PATIENTS Children aged 0 – 15 yrs presenting in Primary Care with orthopaedic complaints.

Conditions of Feet

NB all babies and toddlers are flat footed

Check growth if knee problems

Condition	What to look out for	When to refer	Who to refer to	For further information
Positional Talipes	Present at birth and foot position can be passively corrected	At diagnosis	Physiotherapist	Most positional deformities do not need to be seen. Only refer if slow to resolve or concern that it is not positional.
Structural Talipes	Unable to passively correct foot.	At diagnosis	Paediatric Orthopaedics or Physiotherapist in "Talipes Clinic"	Need physiotherapy, casts and ongoing treatment. It can be associated with developmental dysplasia of the hip or spinal bifida and there is increased risk of subsequent children having the condition

Intoeing	Watch child walk and run. Secondary to: a) femoral anteversion - excess internal rotation of hip and limited external rotation due to habitual sitting in 'W' position, squinting patellae. Worse on running. Knee caps point inwards b) internal tibial torsion - tibia twisted inwards on standing but knee caps point forwards c) forefoot adductus - forefoot twisted inwards	If not gone by age 8 years.	Paediatric physiotherapist Paediatric physiotherapist Paediatric physiotherapist	http://www.orthoseek.com/article/femtorsion.html http://www.orthoseek.com/articles/inttibtor.html http://www.orthoseek.com/articles/metatarsus.html
Flat feet	Normal until 3 years. Flexible - arch present on standing on tiptoe. Rigid - stiff with no subtalar movement. Check not secondary to neurological problem, or joint laxity	If painful or rigid or unilateral	Paediatric Orthopaedics Or Paediatric physiotherapist	
Toe Walking	Very common up to 18 months. Check no neurological problems e.g. cerebral palsy. May be tight Achilles. Can be habitual.	If bilateral and persists beyond 18 months If new onset If unilateral	Paediatric Physiotherapist Paediatric Orthopaedics	

Bunion	Advise sensible shoes	No treatment until skeletal maturity and only if painful		
Mallet toe	Flexed DIP joint	Refer if painful	Paediatric Orthopaedics	
Curly Toe	4th or 5th toe flexed underneath adjacent toe. If multiple look for pes cavus as may be neurological foot	Only if irritation or skin or nail problems. After 4yo as some resolve	Paediatric Orthopaedics	
Toe Polydactyly		Only if causing problems	Paediatric Orthopaedics	
Toe Syndactyly	No treatment necessary			

Conditions affecting the Knee

Condition	What to look out for	When to refer	Who to refer	For further information
Bowlegs	Normal until 3 years.	If unilateral. If marked beyond 3 years.	Paediatric Orthopaedics	Consider rickets and screen for this at GP
Knock knees	Normal 3-5 years old	If unilateral If associated pain at hip	Paediatric Orthopaedics	
Osgood Schlatter's	Overuse from physical exertion before skeletal maturity. Tender +/- swelling at tibial tubercle and pain at tibial tubercle after exercise	If severe or diagnosis in doubt	Paediatric Orthopaedics if in doubt re diagnosis	Symptomatic treatment only - total embargo on sport no longer recommended.

Adolescent anterior knee pain (Chondromalacia Patellae)	Retropatellar pain worse after sitting or coming down stairs. Present in teenage girls and resolves when growth plate complete	If causing significant problem	Paediatric physiotherapist	

Problems related to the Hips

Congenital dislocation of hip dealt with in different guideline
See also 'Limp in childhood' guideline for irritable hip, acute SUFE (slipped upper femoral epiphysis)

Condition	What to look out for	When to refer	Who to refer	For further information
Perthes disease	Avascular necrosis of the femoral head. Usually 3 -12 year old. Boys>girls, 10% have positive family history Usually unilateral hip pain and limp (20% bilateral), 30% present with pain in knee or thigh. May be normal exam	If suspect diagnosis	Paediatric Orthopaedics **- Urgent referral**	Xray may not show it in early stages, but MRI scan confirms http://www.gpnotebook.co.uk
Slipped Upper Femoral Epiphysis (SUFE)	Epiphysis of femur slips out of alignment of rest of femur. Adolescents boys>girls Often positive family history. Acute - will present with severe hip pain. Chronic - pain in knees over weeks or months (usually overweight) +/- limp	If suspect diagnosis	**Emergency referral** Admit to Paediatric Orthopaedics or direct to Emergency Dept for Xray	Xrays must be 'AP' and 'frog leg' views http://www.orthoseek.com/articles/scfe.html **Urgent Xray required**