ORTHOSPORTS

QUESTION FOR PHYSIOTHERAPISTS

QUESTION | A 15 YEAR OLD BOY PRESENTS WITH LEFT KNEE PAIN AND A LIMP ONE WEEK AFTER FALLING FROM HIS BICYCLE. PRIOR TO THAT HE HAD A SORE KNEE ON AND OFF AFTER FOOTBALL AND HIS MOTHER HAS NOTICED THAT HE HAS BEEN LIMPING FROM TIME TO TIME. HE HAS HAD AN X-RAY THAT HAS SHOWN CHANGES CONSISTENT WITH OSGOOD SCHLATTERS DISEASE.

ANSWER | Examination: Further physical examination reveals the patient walks with a limp and has a positive Trendelenberg sign (that is his pelvis drops on the opposite side when standing on the affected leg). He lies with the left leg on slight external rotation. There is no swelling or tenderness around the left knee, and his range of knee motion is normal. His left leg is shortened by 1cm. On flexing the left hip, the leg goes into abduction and external rotation. Attempts at internal rotation cause knee pain.

Diagnosis:
X-rays of the left knee show irregularity of the tibial apophysis. Films of the left hip show a grade one slip (less than 30%) of the upper femoral epiphysis (see figures 1a and 1b)

Management:
The boy is placed on crutches and referred to an orthopaedic surgeon for pinning of the slip in situ (see figures 2a and b)

Discussion:
Slipped upper femoral epiphysis is a semi urgent problem that can cause serious hip deformity predisposing to premature osteoarthritis. The presentation may be chronic (more than six weeks), acute, or acute on chronic.
Patients should be placed on crutches, nonweight bearing and referred to an orthopaedic Surgeon because the risks of progression of the slip and more severe deformity of the proximal femur. Pinning of the slip in situ is indicated to prevent further displacement and encourage closure of the upper femoral growth plate. Attempted reduction of the slip runs the risk of avascular necrosis of the femoral head by causing damage to the vessels supplying the epiphysis. If necessary, excessive proximal femoral deformity may be corrected by femoral osteotomy when the epiphysis has been stabilised.

Importantly, slipped upper femoral epiphysis affects both hips in up to 30% of patients. In this case the boy and his parents should be advised to return for X-rays if he develops a limp or any pain in the groin, thigh or knee on the unaffected side.

Keypoints:

- Any adolescent with thigh or knee pain and a limp should be suspected of suffering a slipped upper femoral epiphysis until proven otherwise.
- The treatment of choice is pinning in situ as a semi urgent procedure

Insitu Fixation - AP

Insitu Fixation Lateral

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