

A Case Report of Perthes Disease in a 2 Years Old Child

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ABSTRACT

Perthes disease is an inadequate blood supply to head of femur causing collapse and femur remodelling. It is commonly seen in 4 to 10 yrs. We here is a child with painful limp on right-side soon after 2 yrs. of age. Initially it was worked up for transient synovitis, then the limp was persistent and further investigations were done and it was found to be perthes disease.

Key words: Femur, Synovitis, Perthes disease

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INTRODUCTION

Youngest Perthes case was found in 13 months old baby and now we have a case of 2 yrs. .this is rare in younger age group.

CASE REPORT

A male child with right-sided limp at around 2 years. He was taken to a nearby hospital and was found limping for a day.

Then he was referred for paediatric orthopaedic opinion. He was reviewed and there was no history of trauma. O/E he was afebrile with stable vitals. ROM is full a free in both hips.

Limping is present in right side with gait(antalgic). Blood investigations are done. ESR is elevated (17 mm/h). Other blood routine investigations are normal. Septic arthritis was excluded .

Discharged the patient as transient synovitis and the child was still limping after a week even though ESR went normal. X-ray showed a focal collapse in right femur head.

He was limping continuously and X-ray taken at 6 and 9months showed progressive disease (Figures 1-3).



Figure 1: Initial radiograph of the pelvis.



Figure 2: X-ray after 6 months.



Figure 3: X-ray of the pelvis at 9 months.

Investigations

MRI was taken and it confirmed perthes disease with AVN with femoral capital epiphysis collapse (Figure 4).

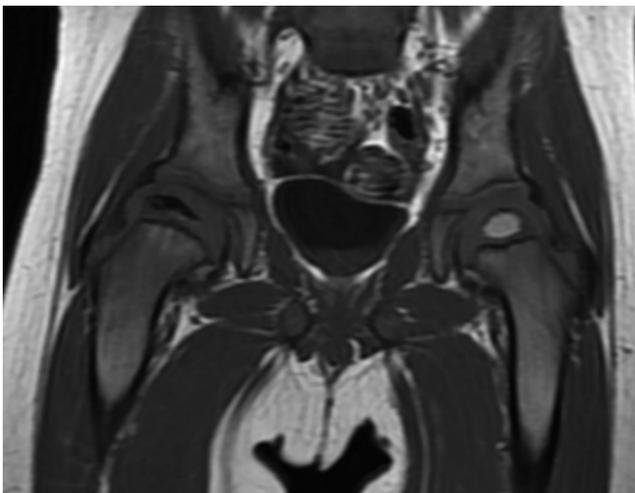


Figure 5: MRI at 9 months.

Differential diagnosis

- Septic arthritis.
- DDH.
- Transient synovitis.
- Meyer's dysplasia.
- Non-accidental injury.
- Juvenile idiopathic arthritis.
- Leukaemia.

Treatment

There were no complaints from the child. Abduction (0-30 degree) was maintained and femoral head appears normal. Parents advised for activity modification and avoiding impact activities. To get better outcome passive mobilization should be done.

Outcome and follow-up

He was limping without any symptoms for over a year. It was observed by his mother and went to hospital where he reviewed every 6 months and radiographic investigations were done at every visit.

DISCUSSION

Child presenting with a limp so the causes are to be noted in all aspects. Mainly we must first exclude all emergency conditions. Trauma and infection are considered. Cause of limp requiring emergency treatment is eliminated if blood and radio investigations are normal. If limping resolves in few days it may lead to a point of transient synovitis.

Perthes disease mostly occurs at 4 to 8 yrs. of age. Some cases are reported below 4 yrs. Sometimes DDH was also a factor for AVN. Another possible cause was Meyer's dysplasia. Radiologically there is delay development of femoral epiphyseal nucleus. It regresses with age and completely disappears radiologically at 6 yrs.

The prognosis is good in children in conditions at younger age. Few reports showed good outcome without surgery.

Other causes: Dyschondroplasia, hypothyroidism, multiple epiphyseal dysplasia's, arthritis.

Even though Perthes disease is rare at this age, after excluding infection and trauma from our diagnosis we should consider it if there are relative symptoms [1-7].

Bullets

- Bone ,joint infection are considered if the patient is limping
- Observation is the next step.
- Transient synovitis is considered if limping resolves
- If limping is present workup on other investigations.
- Younger child are carefully watched up for perthes disease.

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