

# A rare occurrence of same hip involvement by Perthes and Slipped capital femoral epiphysis in succession; case report.



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## Introduction

- Perthes disease and Slipped capital femoral epiphysis (SCFE) are two common paediatric hip pathologies which may lead to devastating complications if left untreated.
- The age of onset is different in both of these pathologies.
- Though very few cases of coexistent Perthes and SCFE in the same child have been reported earlier in the literature, the majority of them had involved opposite hips.
- We hereby report a rare case scenario of affection of same hip involvement in a child by Perthes and SCFE in succession

## Case details

- A 7-year-old boy was presented with a painful limp with restriction of abduction and internal rotation.
- Radiographs revealed Perthes disease of the left hip (stage of avascular necrosis) and was treated conservatively with traction followed by non-weight bearing walking.
- On follow-up, after 6 months, the extrusion of the femur head was increased. Hence he was treated with varus derotation osteotomy.
- The disease healed completely after 2.5 years.
- He underwent implant removal. He got a spherical congruent hip and was regularly followed up for 8 years. He had no restriction of activity.

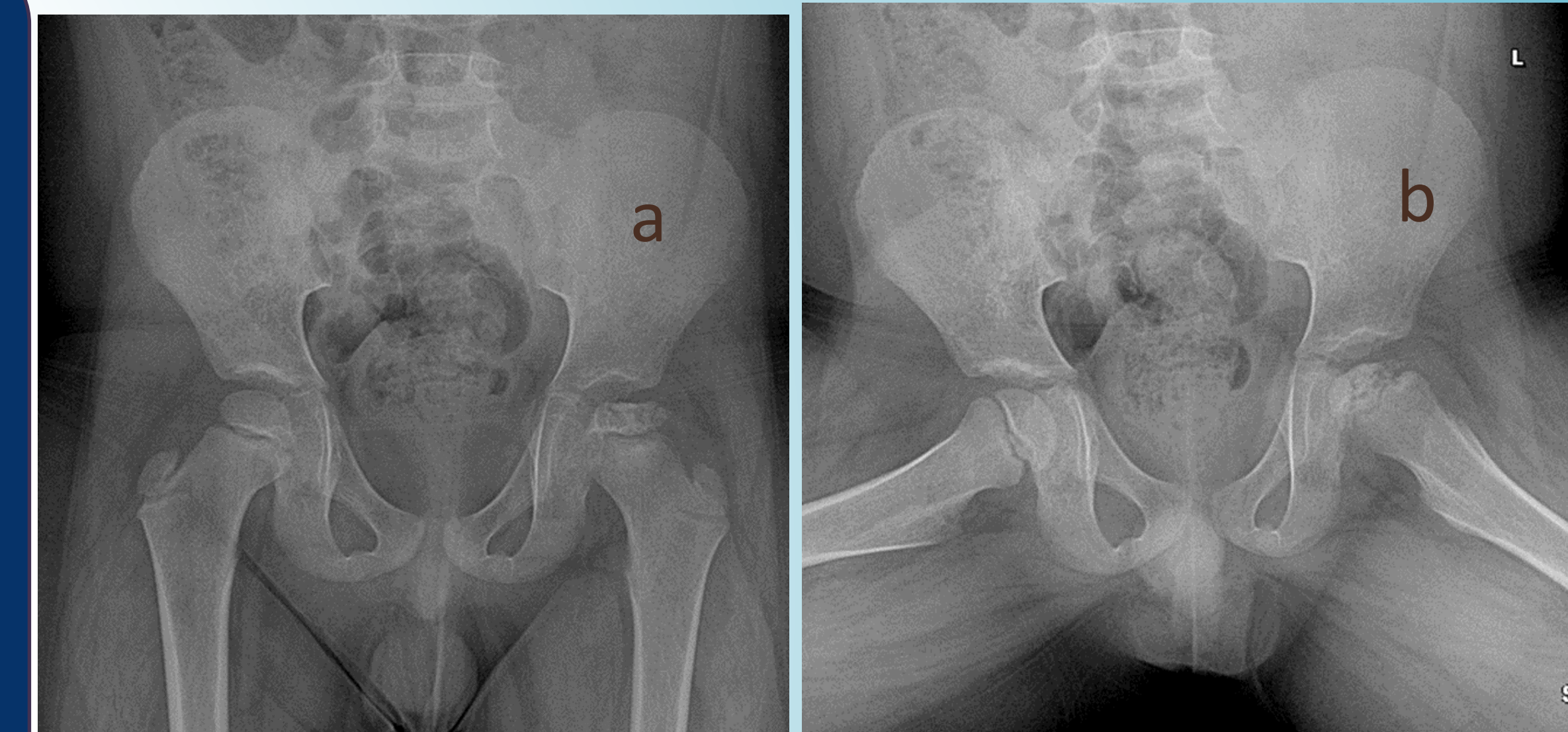


Fig a & b-AP & lateral radiographs showing Perthes disease of left hip in stage of fragmentation

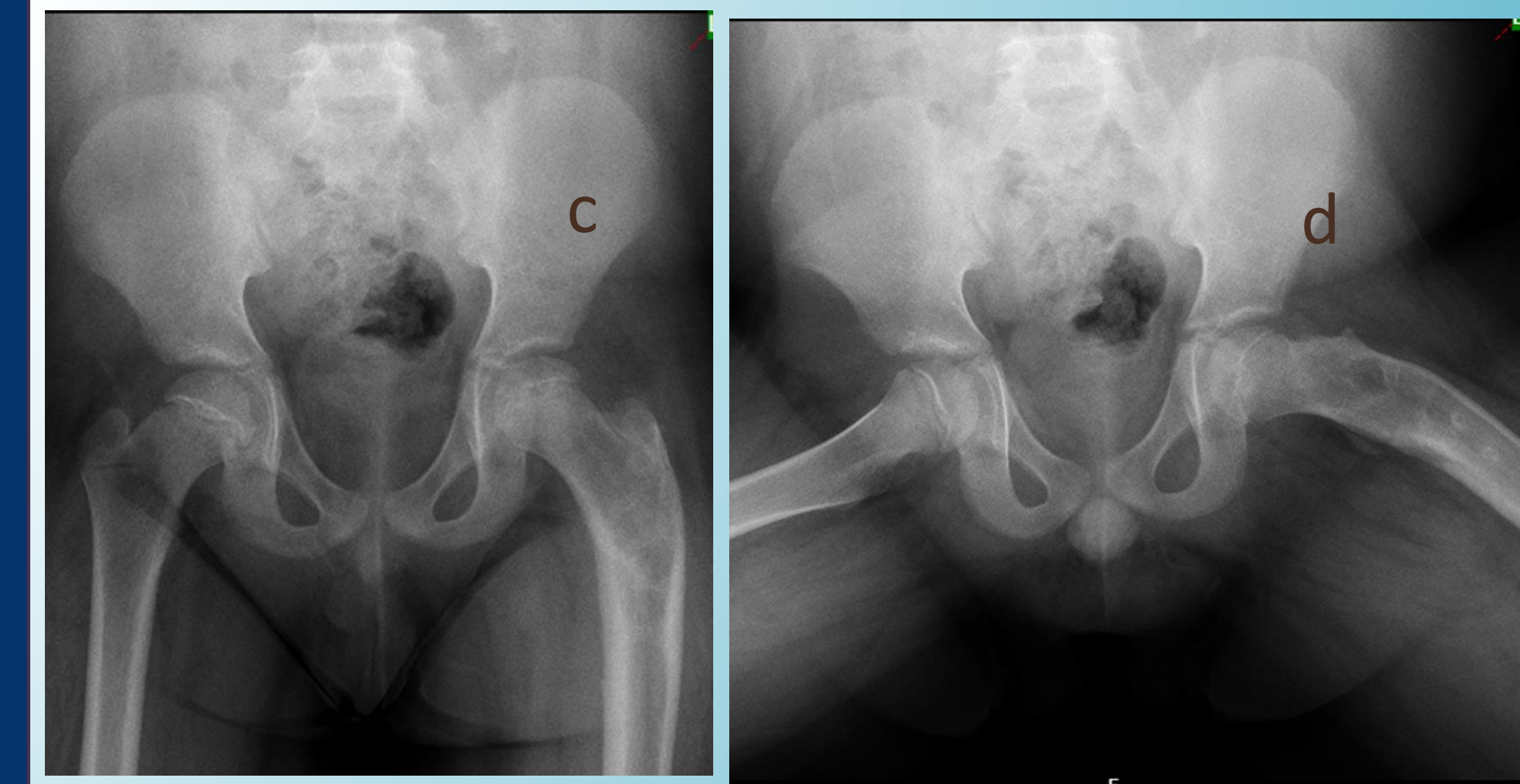


Fig c & d- Post op follow up radiographs showing healed Perthes with spherical congruency of left hip



### Case details (cont..)

- At the age of 15 years, he developed spontaneous pain of the same side ( left hip) without incidence of acute trauma.
- The child was obese (wt 110 kg) and was unable to bear weight on the left side.
- The radiograph revealed left side severe Slipped capital femoral epiphysis (SCFE).
- He was treated with modified Dunn osteotomy.
- At the latest follow-up at 12 weeks, he had no pain and had started full weight bearing.

### Discussion

- Very few cases of coexistent SCFE with Perthes disease have been reported in the literature. Majority of them had involved opposite hips.
- Crawford AH et al in 1975 had reported an unusual concurrent occurrence of SCFE in one hip and active Perthes disease in opposite hip in a six year old child which was managed successfully with traction and bed rest.[1]
- Graziano et al in their case series in 1987, had reported 3 cases of coexistent Perthes and SCFE involving opposite hips at different age of presentation.[2]
- Ruoff MJ et al had reported a case of Perthes disease with SCFE in a child with downs syndrome involving the same hip. Patient had sustained a fall and developed SCFE one and half year following treatment ( cheilectomy) for Perthes disease. It was treated with in situ pinning.[3]
- Our case is unique due to involvement of same hip in a child who had no associated congenital condition and no trauma history prior to development of SCFE. The management was operative for both pathologies resulting in good outcome.

### References

1. Crawford AH. Legg-Calvé-Perthes disease coexistent with slipped capital femoral epiphysis. A case report. J Bone Joint Surg Am. 1975;57(2):280-281.
2. Graziano GP, Kernek CB, DeRosa GP. Coexistent Legg-Calvé-Perthes disease and slipped capital femoral epiphysis in the same child. J Pediatr Orthop. 1987;7(1):61-62.
3. Ruoff MJ, Schwentker EP. Legg-Calve-Perthes disease and slipping of the capital femoral epiphysis in the same child. Orthopedics. 1992;15(9):1070-1072.

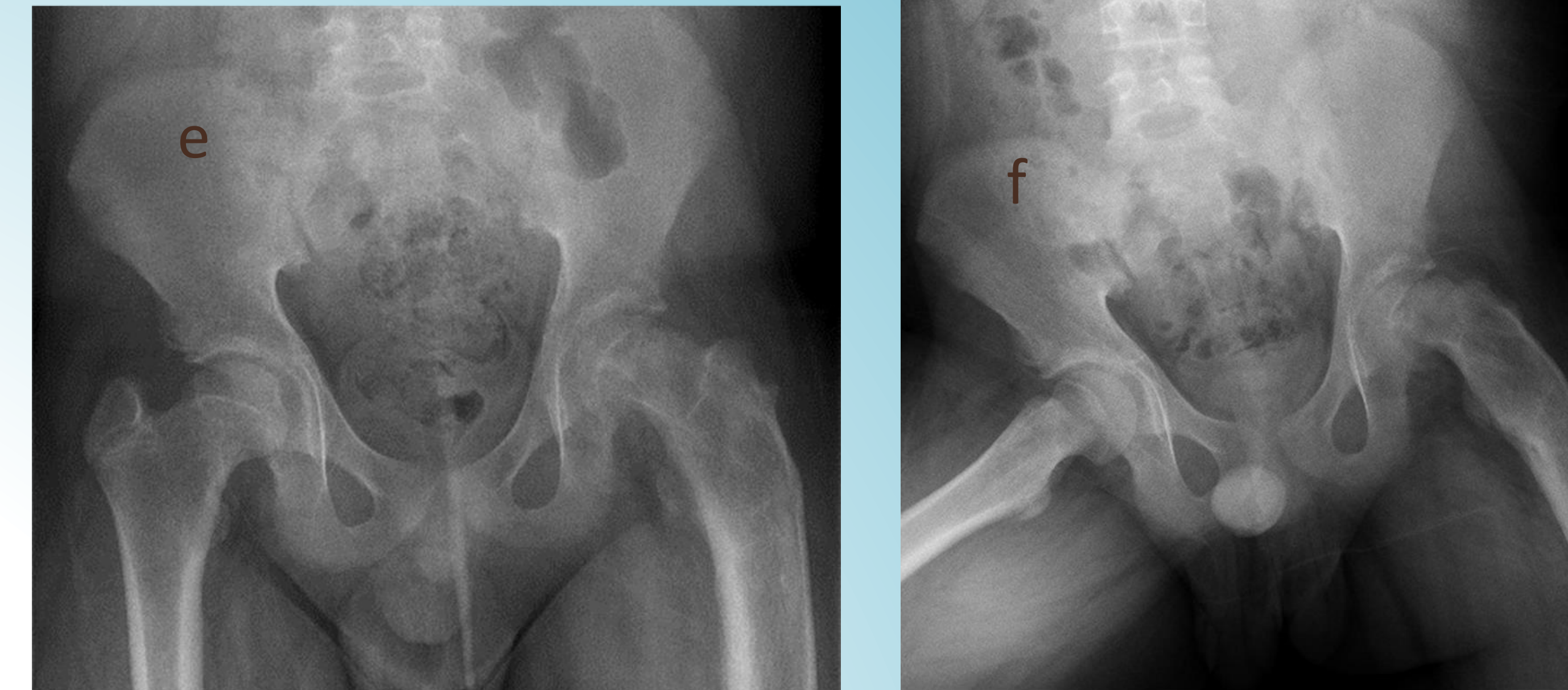


Fig e, f- Anteroposterior & lateral radiograph showing SCFE of left hip

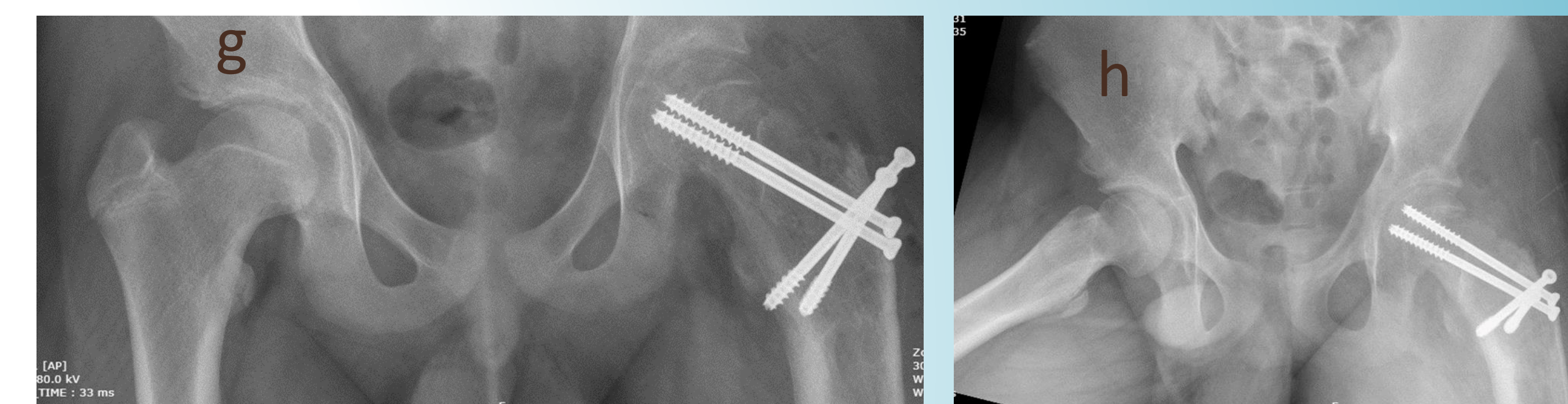


Fig g & h-Post op radiographs following fixation of left SCFE with modified Dunn osteotomy

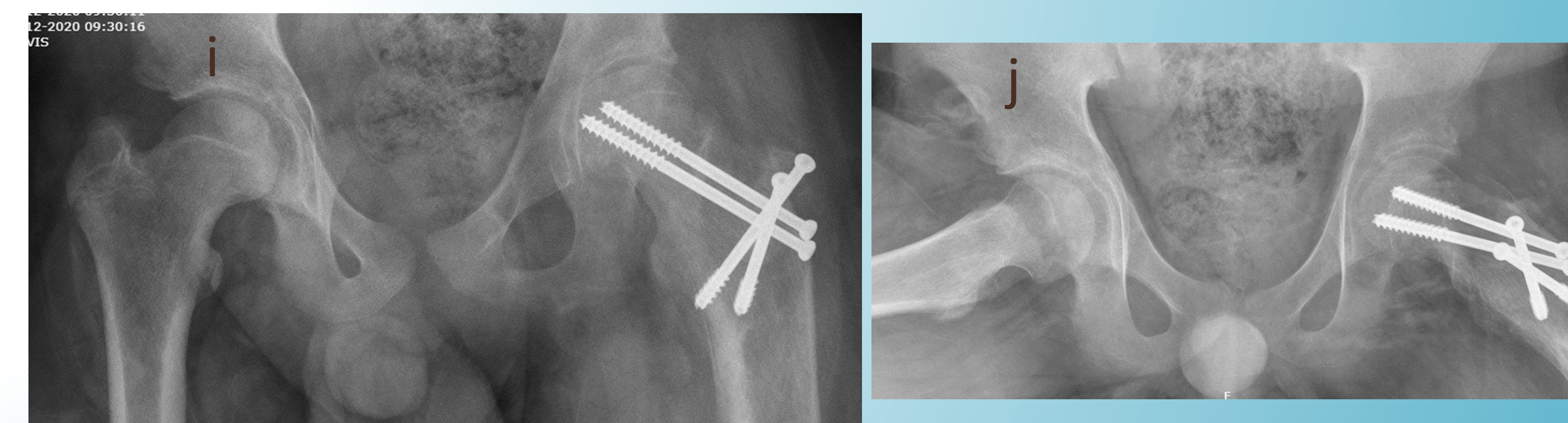


Fig i & j- 3 months post op follow up radiographs showing complete healing with good reposition of left epiphysis