

Adolescent Anterior Inferior Iliac Spine Avulsion Fracture Operative Treatment: A 14-Year Follow-Up Case Report

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Objectives: Pelvic apophysis injuries are generally seen in adolescents and encountered in the form of avulsion fractures which occur with the short-term contractions of the muscles that hold apophysis, following a trauma. In general the iliac crest, the anterior superior iliac spine (ASIS) and the pubic bone fractures are frequently seen but anterior inferior iliac spine (AIIIS) fractures are rare. These cases are often treated conservatively, surgical treatment is rarely necessary. In this presentation, AIIIS avulsion fracture case that had undergone surgery and had been followed for 14 years was aimed to be stated.

Methods: 16 year old male patient who was suffering from sports injuries that happened 40 days ago was admitted to our clinic in February 2000 with complaints about left hip and groin pain. Physical examination and radiographic evaluation of the patient identified left hip AIIIS avulsion fracture. Due to more than 2 cm fracture fragment displacement and the patient being a professional football player who had high functional expectations, surgical treatment was planned. Under general anesthesia, after open reduction, internal fixation was performed with 1 cannulated screw. There were no complications observed at follow-up. Patient returned to training at 3 months postoperatively. 14 years after surgery, the patient admitted to a neurologist with complaints of headache and MRI was required to establish the cause. The patient admitted to our clinic in order to get the confirmation whether his implant was MRI compatible.

Results: On clinical assessment, after 14 years, the patient didn't have any complaints at left hip. Left hip flexion was 120°, extension was full, abduction was 40°, adduction was 20°, flexion internal rotation was 30° and flexion external rotation was 40°. Radiographs of the pelvis were normal. On the patient's functional assessment, modified Harris Hip Score was 100.

Conclusion: Pelvic apophysis injuries are rare injuries seen in adolescents usually as avulsion fractures. These injuries are often treated conservatively however may require surgical treatment for professional athletes with a high functional expectations. In this patient who underwent surgery, at the end of the 14-years long follow-up, functional results were found to be close to perfect.

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