Pelvic Apophysitis: Painful Hip in Adolescent ¹Abd Rahim, Mohd Zuhail; ¹MK. Nadia; ¹AA. Aziah; ¹A. Anuar

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INTRODUCTION:

In adolescent, growth related pain is most likely due to traction of muscle pulling on bony growth centers, called apophysis. When the muscle attached is excessively tight or overworked, it can increase tension and stress on the apophysis and subsequently causing inflammation. Pain and inflammation of apophysis is diagnose as apophysitis. Pelvic apophysitis typically presented with dull aching pain associated with muscle overuse, and should be differentiated from pelvic avulsion fracture which present as an abrupt injury. Misdiagnosis leads to disability, chronic pain, and poor sports performance. We present a rare case of ASIS apophysitis which was documented in our center.

REPORT:

15-year-old boy has been having dull aching pain over right hip for 3 days but was able to ambulate. Upon running, patient complaint of a sharp pain over right hip, subsequently unable to ambulate and was brought to hospital. Patient denied fall or trauma prior to hospital visit. Physical examination noted full range of movement right hip with tenderness at right anterior superior iliac spine bony prominence, associated with pain upon hip extension. Otherwise, no other bony pain.

Anterior-posterior pelvis radiographs demonstrated an ASIS apophysitis. There was no radiological evidence of avulsion fracture or previous injury.

Explained to patient regarding inflammation of his right ASIS secondary to overuse of muscle during active sports session.

At 4-week follow-up, patient had complete resolution of symptoms, full active hip range of movement, no bony tenderness and mobilized independently without walking aids. Patient also

had returned to his sporting activities despite advice for cessation of strenuous activity for 4-6 weeks.



Figure 1: ASIS Apophysitis

CONCLUSION:

Many patients remain undiagnosed and continue pursuing their athletic recreation leading to chronic irritation. Awareness of pelvic apophysitis in sporty teens should be prioritize. Knowledge of anatomy allows to correctly identify the characteristic appearance and location of apophysitis injuries. Misdiagnosis or late diagnosis might compromise patient sport performances.

REFERENCES:

- 1. S Papasterqiou; J Orthop Case Rep. 2020; 10(1): 82–85.
- 2. Umile Giuseppe Longo; *British Medical Bulletin*, Volume 120, Issue 1, 1 December 2016, Pages 139–159, https://doi.org/10.1093/bmb/ldw041