

A Rare Case of An Apophyseal Iliac Crest Avulsion Fracture

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INTRODUCTION:

Pelvic apophyseal avulsion injuries are generally uncommon and usually seen in male adolescent especially during sports trauma, though it has been reported to occur spontaneously in a patient on prolonged steroid usage. Apophyseal avulsions can occur at the anterior superior iliac spine, anterior inferior iliac spine, pubic symphysis and lesser trochanter. The rarest type of avulsion is at the iliac crest, accounting for about 2% of cases.¹

Physis is the weakest region in children and adolescents, especially during times of growth acceleration. Strong muscle attachment makes it prone to avulsion injuries. We present a case of left anterior iliac crest apophyseal avulsion fracture in an adolescent during playing football.

REPORT:

A 15 year old boy, a football player, presented with complaints of left pelvic pain after he kicked a ball with his right leg, while twisted his body to the right. He had sudden pain over his left pelvic causing him unable to weight bear.

Clinical examination revealed tenderness over his left iliac crest with limitation of motion of the left hip due to pain. Plain X-ray showed avulsion of the left anterior segment of the iliac crest apophysis. He was treated conservatively and prescribed non-steroidal anti-inflammatory drug, advised to rest from sports and to non-weight bear for 3 weeks.



Figure 1. White arrow on AP view of pelvic X-ray shows left apophyseal iliac crest avulsion fracture

CONCLUSION:

An iliac crest apophyseal avulsion is said to result from sudden forceful contraction of the external oblique, transverse and internal oblique muscles attached to the apophysis. Recruitment of such muscles are often observed in sports that require sudden change in direction of trunk or pelvis in relation to the lower limb such as football, tennis, wrestling and gymnastics.

The fragment displacement seen on X-ray is due to secondary pull from the gluteus medius and tensor fascia latae, however displacement is limited due to the broad muscle insertions on the pelvis. Therefore, most authors reported good outcome with conservative treatment of such injuries. Surgery is considered for significant displacement of more than 3cm or if fracture fragment compromises nerve or vascular supply.

REFERENCES:

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