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RESEARCH ARTICLE

ECTOPIC KIDNEY DISCOVERED AFTER ABDOMINAL TRAUMA: ABOUT ONE CASE REPORT

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Abstract

Pelvic kidney ectopia is one of most frequent upper urinary tract abnormalities exposed to trauma injuries. In that matter a patient presented with hematuria and abdominal pain in a trauma setting should make us consider this diagnosis. The abdominal CT scan is the key to make the diagnosis and allows to assess the type and severity of the lesions.

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Introduction:-

Renal ectopia designate a kidney in abnormal position but located on the proper side. However ectopic kidney could be associated with anomalies including hydronephrosis, vesicouretral reflux, that stay clinically asymptomatic. Pelvic kidneys are however more prone to blunt trauma injury (1).

We report case of ectopic kidney discovered after abdominal trauma.

Case presentation:

We present a case of 7 years old boy who was involved in school fight.

Initially the children presented to the emergency with left pelvic pain associated with gross hematuria. The patient was hemodynamically stable.

The abdomen and pelvis CT scan showed upper polar fracture of an ectopic left kidney associated with two upper polar lacerations and surrounded by peripheral hematoma suggestive of a grade III injury.

The right kidney is normally positioned, and the two kidneys have the same size well differentiated, regular contours secreting and excreting in physiological time.

Discussion:-

A pelvic kidney is less protected and therefore prone to injury even after low velocity trauma. Abnormal kidneys in total represented 7% of all blunt renal trauma cases, and included such conditions as renal cysts, hydronephrosis, and renal tumors (2).

The American Association for the Surgery of Trauma (AAST) classification represent the most widely used grading system for renal trauma.

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Severity is assessed according to the depth of renal parenchymal damage and involvement of the urinary collecting system and renal vessels.

The AAST grade is a predictor for morbidity in blunt and penetrating renal injury, and for mortality in blunt injury.(3)

Most blunt pediatric renal injuries are low grade (I-III) and are likely to be sustained by male patients over the age of 6 years.(4)

Grade I refers to subcapsular hematoma with no laceration, grade II include perirenal hematoma confined to perinephric fascia and laceration <1cm depth and grade III can be defined laceration > 1 cm without urinary extravasation.

The management of low grade kidney injuries is conservative, nephrectomy rarely indicated in case of hemodynamical instability.



CT of the abdomen and pelvis with intravenous contrast demonstrating polar fracture surrounded by hematoma.

Conclusion:-

We present a case of a grade III injury of an ectopic pelvic kidney, and suggest that every abdominal trauma especially if associated with symptoms should be explored by CT scan.

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