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Case Report

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ACUTE OBSTRUCTIVE RENAL FAILURE (AORF) ON FAECAL IMPACTION, ABOUT A CASE

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SUMMARY

Acute obstructive renal failure is a life-threatening medical and surgical emergency, the etiologies of which are multiple. Among the rare etiologies, rectal fecal impaction was found especially in the elderly. We report the clinical case of a young patient who presented with acute obstructive renal failure on a fecal impaction whose evolution was favorable after evacuation of the fecal impaction.

INTRODUCTION

Faecal impaction results from chronic constipation, the most severe form of faecal impaction, imposing early diagnostic and therapeutic management, the stools forming a compact mass of variable location, generally rectosigmoid, but can be higher, which can cause marked dilation of the colon (megacolon), stercoral ulcerations, necrosis and perforations of the intestinal wall.[1] They can also in rare cases produce ureteral dilation, hydronephrosis and consequent acute renal failure.[1] Constipation is a frequent reason for consultation not only in the elderly but also in the young. The compliance of the recto-colic digestive wall is such that sometimes these often bulky masses are well tolerated. Admittedly, fecal impaction is rare in young subjects but can be serious by causing mechanical complications, particularly on the urinary tract.[2]

This observation shows that fecal impaction should be considered as a possible cause of urinary tract compression.

OBSERVATION

16-year-old patient, followed for congenital heart disease and Spina Bifida, with a history of repeated infections and indwelling catheter for 2 years, who consulted in the emergency room for bilateral low back pain more accentuated on the right side complicated by oliguria.

The clinical examination found a conscious patient in poor general condition, afebrile with slight right lumbar tenderness with the presence of faecal impaction on digital rectal examination.

Biological assessment showing acute renal failure with serum creatinine at 68 mg/l, urea at 1.60 g/l with normal serum potassium and anemia at 8.5 g/dl. In front of this table, a radiological assessment made of renal-vesical ultrasound objectifying a major bilateral uretero-hydronephrosis laminating the cortex and completed by an abdomino-pelvic CT scan without injection of iodinated contrast product highlighting a Significant stercoral stasis at the level of the colon sigmoid and rectum with bulky rectal fecaloma measuring 103*103 mm in diameter pushing the bladder forward and to the right (Figure 1).

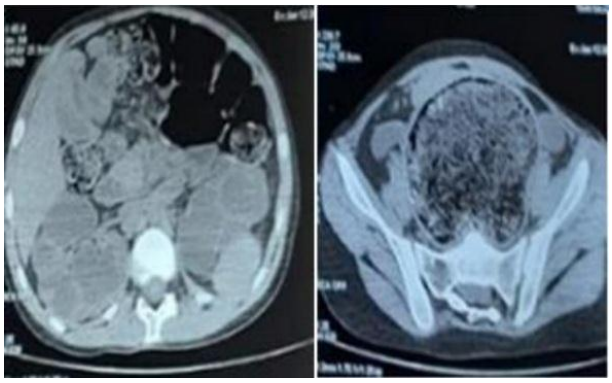

Figure 1: Abdomino-pelvic CT scan without injection of iodinated contrast material showing bilateral ureterohydronephrosis on a faecal impaction.

The patient underwent an emergency urinary diversion by bilateral nephrotomy first and a bilateral JJ catheter ascent second (Figure 2).

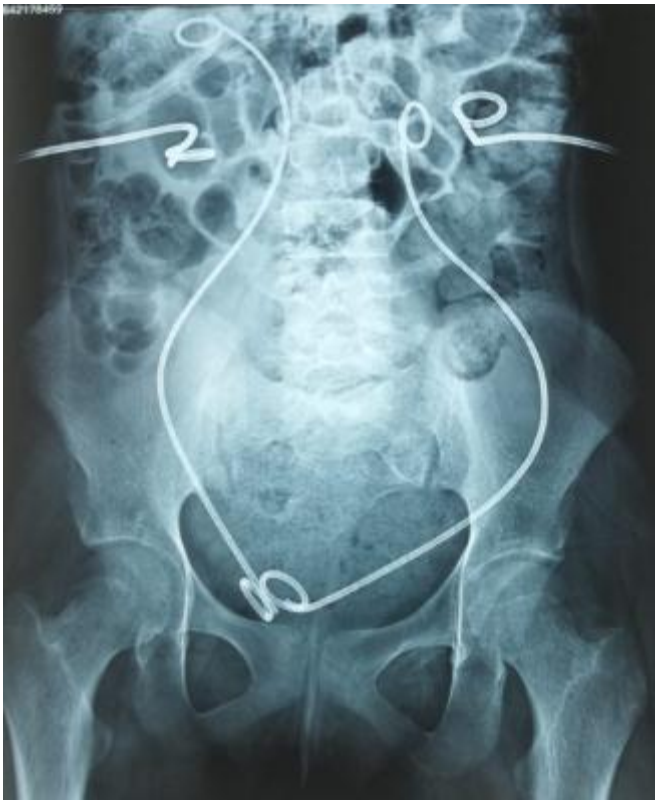

Figure 2: Standing anteroposterior plain urinary tract radiograph carried out after raising the bilateral JJ catheter.

The extraction of the faecal impaction was done manually with the use of laxatives and a rectal probe. The evolution was favorable with a good clinical and biological evolution.

DISCUSSION

Constipation and fecal impaction can lead to colonic dilatation, stercoral ulcerations, bowel wall necrosis, and perforations. They can also produce in rare cases ureteral dilation, hydronephrosis and acute renal failure.They have been more often reported in the elderly or in the context of chronic pathologies. Fecal impaction should be considered as a possible cause of urinary tract compression.[1,3,4]

A case was described in a 47-year-old woman who died of bladder rupture caused by fecal impaction, resulting in Gram-negative sepsis and acute renal failure. Mixed Gram-negative and positive bacteria detected by postmortem cultures of peritoneal fluid and blood are compatible with enteric organisms. Peritonitis and sepsis have been reported as sequelae of spontaneous bladder rupture.[1]

Another case was described in a 90-year-old woman with a history of chronic constipation. The history of the disease was noted by the presence of abdominal pain which had been progressing for a week with associated overflowing diarrhoea, nausea and vomiting. On balance sheet, she had impaired renal function with a creatinine level of 3.23 mg/dl. CT scan revealed a large fecal impaction occupying the rectal ampulla, sigmoid and descending colon, which extended to the epigastrium and had a maximum craniocaudal length of 35 cm, a lateral diameter of 12.7 cm and anteroposterior of 14.8 cm. The fecal impaction compressed the right pelvic ureter, causing uretero-pyelocalicial dilation and changes associated with obstructive uropathy and hydronephrosis.[5]

Regarding the young subject, another case was described in a 12-year-old boy who consulted for chronic, diffuse abdominal pain with anorexia. The interrogation was difficult because the child presented a severe autistic syndrome. Clinical examination revealed a hard abdominal mass, painless on palpation, rising above the umbilicus. The standing AP abdominal X-ray revealed a rounded granite opacity occupying the entire hypogastrium and extending well into the suprapubic region. This mass was reminiscent of a faecal impaction. Abdominal CT scan with injection of contrast product objectified the extensive calcified fecaloma, pushing back the adjacent structures, and the digestive and vascular structures. This mass compressed the right ureter, leading upstream to major ureteral and pyelocalicial dilation responsible for a delay in right renal excretion. On the left, the ureteral compression was more modest, with an ampullar pelvis. Faecal impaction was treated with digital extraction of the faecal impaction under premedication, followed by dietary and drug management of severe constipation.[6]

CONCLUSION

Faecal impaction is a severe form of chronic constipation and faecal impaction if untreated or poorly treated, generally observed in elderly subjects with rare cases described in young subjects. It can be considered as a possible cause of compression of the urinary tract which can cause an AORF involving the vital prognosis in certain situations imposing an adequate management of any chronic constipation to getter against the impact on the functional and vital prognosis whether it is at short or long term.

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