

A Sinister Cause of Hip Pain- Malignant Entero-Cutaneous Fistula

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Summary

Hip pain is common and multifactorial. A rare & sinister cause is a upper thigh abscess originating from a malignant Rectal Carcinoma with a fistulous tract through the pelvis, & connecting to the soft tissue planes of the thigh. We present a case report of a rare recurrence of Rectal Carcinoma, previously treated with Resection, Chemo + Radiotherapy, but now presenting after 9 years as a Thigh abscess. The patient suffered 3 months of chronic left hip pain before presenting with acute inability to move. On examinations, the patient was septic with likely thigh abscess. We arranged urgent investigations including an MRI which revealed air pockets in soft tissue planes overlying the hip. Surgical exploration of thigh, revealed feculent collection; confirmed to have bowel flora via microscopy. Further surgical consultation and investigations revealed a rectal fistula connecting with the thigh plane posteriorly via Glutei musculature, likely through sciatic foramen. Thus, revealing the recurrence of Rectal Carcinoma. Hence, Hip pain can occasionally harbour a sinister pathology such as colorectal carcinoma with fistulous connection to the tissues of hip. A sound medical history and appropriate investigations could detect such causes in time.

Background

Colorectal Carcinoma has been known to have varied presentations. They are common and are usually diagnosed early due to their abdominal symptoms. However, on rare occasions a silent form of malignancy can be disguised as a thigh abscess formed of feculent bowel contents. This happens due to a local infiltration of the cancer through the perineum and into thigh compartments via

(a) The Psoas muscle deep to the inguinal ligament (common; and to anterior thigh)

(b) Through the Femoral canal

(c) By way of the Obturator foramen and

(d) Through the Sacro-sciatic notch (to postero-lateral thigh)[1]. The collection in those tight thigh compartments can lead to symptoms of hip pain and inability to move. In unfortunate cases, patients may present with Sepsis.

Case

A 81 yr patient was admitted with the complaints of inability to weight bear on left leg for 3 days and chronic left hip pain for 3 months. There was history of Colorectal Carcinoma 9 years ago, which was resected and treated with Radiotherapy and Chemotherapy. Regular surveillance was undertaken. A Sigmoidoscopic biopsy taken 1 year ago had not shown any neoplastic changes.

On presentation the patient was septic with CRP- 369, WCC – 16.9. Left hip and thigh were painful on global movement. Superficial skin over the hip was slightly indurated but no signs of cellulitis existed. Interestingly, there were no abdominal symptoms in the recent past history.

Imaging

X Ray of the pelvis showed Gas shadow in soft tissues planes of left hip joint and thigh, postero-laterally. (Figure 1)

Urgent MRI: Normal hip joint and femur, but diffuse edema of pelvic and upper calf muscles with edematous and indistinct myo-fascial planes & air pockets in glutei musculature tracking towards calf. (Figure- 2, 3, 4)

And hence a suspicion of Gram negative thigh abscess was made with possibility of gas gangrene.



Fig1: Gas overlying hip joint and femur, indicative of an infection.

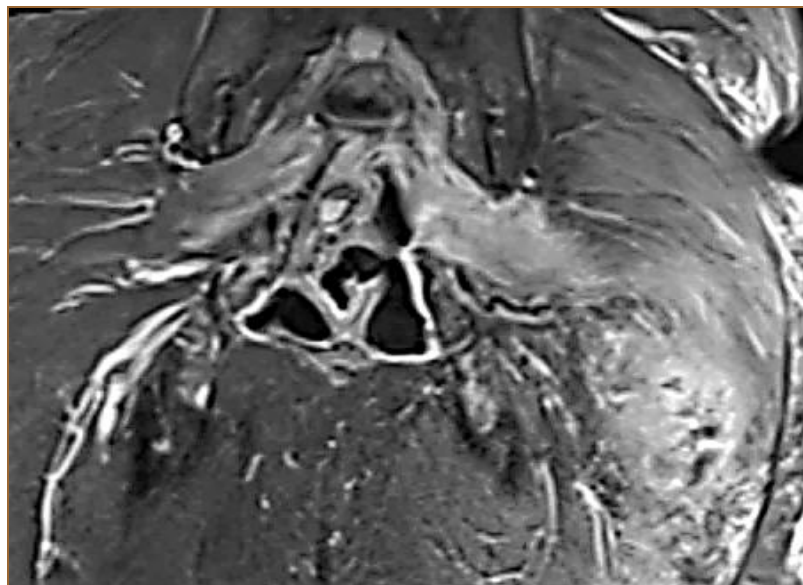


Fig2: Fistula tracking to thigh

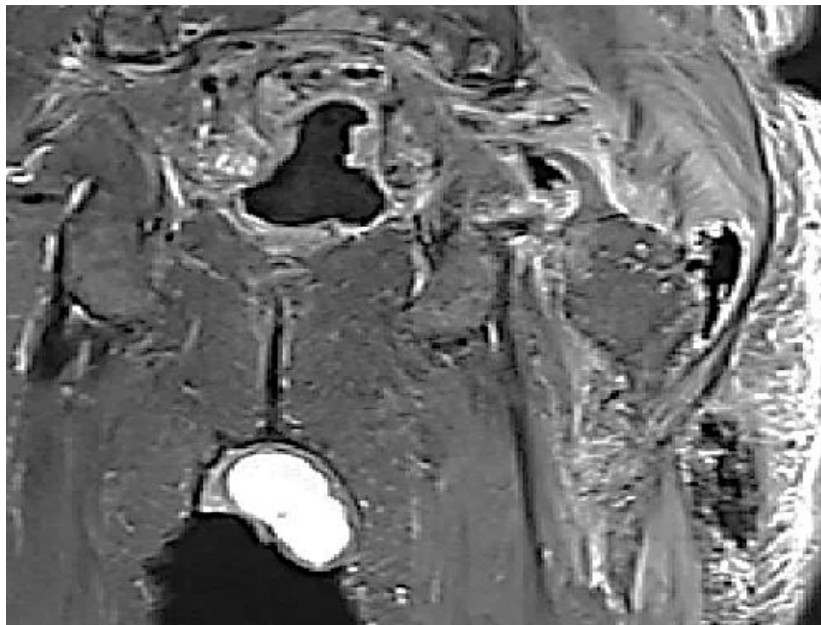
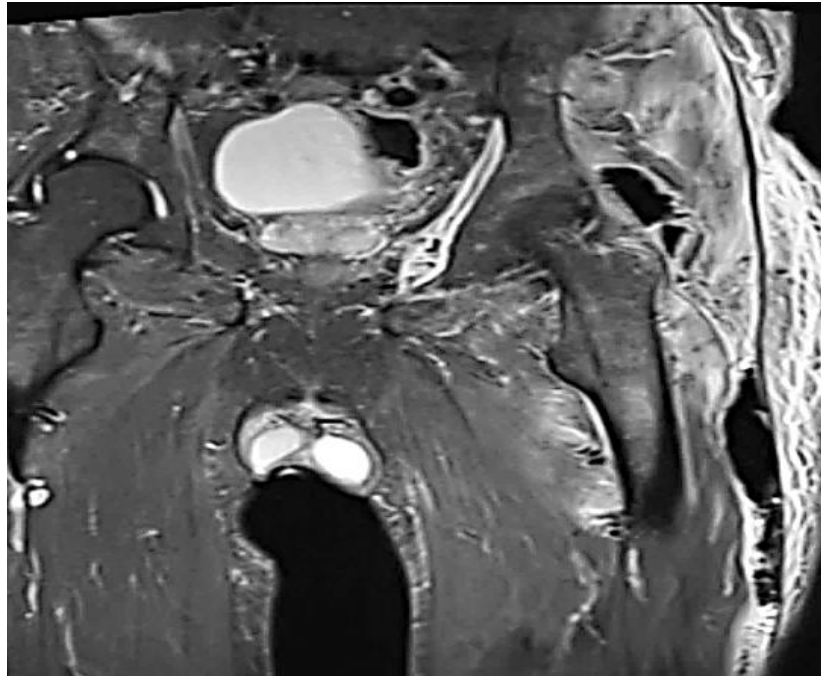


Fig 3, Fig 4: Diffuse oedema of thigh and calf muscles with indistinct myofascial planes; - loculated air pockets in the glutei musculature tracking inferiorly

Initial Management

Intravenous Antibiotics and Fluids along Sepsis pathway were initiated but the need for urgent surgery was recognised.

- Emergency surgery: Exploration of thigh was undertaken. It revealed, black granular & foul smelling collection in the postero-lateral aspect of thigh within the subfascial plane and extending upto the vicinity of knee joint. Interestingly, the muscles underneath were unaffected. After washout, wound was packed and this was followed by pack removal and vac dressing a few days later. The patient was treated in ICU, subsequently due to fulminant Sepsis.

The samples obtained for culture and histology revealed a presence of Gram negative flora consistent with bowel organisms.

Further Management

Surgical opinion was sought immediately which led to the finding of erosion of posterior wall of rectum and sacrum via Sigmoidoscopy. A concurrent CT pelvis revealed a fistula formation extending from the rectum to the upper thigh through the gluteus muscles. Defunctioning ileostomy was created after taking biopsies for histology.

Discussion

In any case of thigh abscess the differential diagnosis must include,

- a) Necrotising Fasciitis
- b) Gas gangrene
- c) Enterocutaneous fistula
- d) Hematoma

Most commonly recognised GI lesions responsible for fistula formation into thigh are

- Crohn's disease (inflammatory)
- Colorectal Carcinoma (tumor)
- Retroperitoneal abscess (infective)

The connection could exist:-

- (a) Along the Psoas muscle deep to the inguinal ligament (common; and to anterior thigh);
- (b) Through the Femoral canal;
- (c) By way of the Obturator foramen; and
- (d) Through the Sacro-sciatic notch (to postero-lateral thigh), as in the current case.

Moreover, there could be no Gastrointestinal symptoms or signs prior to presentation. And usually thigh abscess denotes a stage of fulminant sepsis. The mortality can be up to 50% [6].

Conclusion

Thigh abscess; presenting with hip pain, can have a sinister cause such as Colorectal Carcinoma. A thorough history, and a sound clinical judgement aided by investigations (urgent MRI) can help detect the cause to help us initiate interventions early.

References

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