Case report

Perianal ischiorectal abscess type due to ruptured prostatic abscess in a diabetic patient: A case presentation

Abstract:

Perianal abscess arises from the anal glands in crypts of the dentate line of anal canal mucosa. Over 90% of perianal abscess takes its origin at the level of dentate line where the squamocolumnar junction and 4-10 anal glands reside**.** Anorectal abscess due to noncryptoglandular etiology is uncommon. We present here a perianal ischiorectal abscess type due to ruptured prostatic abscess in a diabetic patient.

Keywords: Prostatic abscess, Perianal abscess, Diabetes mellitus, perineal pain. Perianal pain, Ischiorectal abscess, cryptoglandular infection, dentate line, non-cryptoglandular infection.

Introduction

Perianal abscess due to ruptured prostatic abscess is a rare occurrence. Due to the aggressive antibiotics usage in urinary tract infection, prostatits to prostatic abscess transformation is rare nowadays. However, diabetic patients, immunocompromised individuals, Anorectal foreign bodies, malignancy, Anorectal or colonic tuberculosis, postoperative infection of the Anorectal area, ulcerative colitis, crohn’s disease, receptive intercourse, and transplant patients, patients on immuno suppressive drugs, post radiotherapy, sexually transmitted diseases and prostate infections are the uncommon causes of perianal abscess, due to noncryptoglandular etiology. Detailed history, digital rectal examination and radiological investigation like

CT, MRI pelvis can detect underlying prostatic abscess in a patient with perianal abscess.

Case report:

42 year old male, presented with pain in the perineum, perianal area and also had difficulty to sit on the couch. There was also history of fever with rigor, dysuria frequency and urgency of micturition of 3 weeks duration. He was treated as urinary tract infection with antibiotics in two hospitals.

On examination, patient was in intense perianal pain, febrile, temperature 100.2 F, Digital rectal examination revealed diffuse tender bulge noted from 12 O' clock position to 4 o'clock position in the perianal area. Prostate gland was tender, enlarged and boggy. A diffuse tender swelling was also noted on the mucosal aspect of the anal canal between 12 O' clock position to 4 o'clock position.

Basic blood investigations, Urine routine , Blood sugar, Urea creatinine estimation showed raised total count, 20-25 pus cells in urine exam, urea creatinine within normal limits.C-reactive protein raised .MRI of the perianal confirmed extensive prostatic abscess arising from the posterior aspect of left lobe of the prostate gland extending through the left levator ani muscle and entering left ischiorectal abscess.

MRI pelvis and perianal area demonstrated a complex multiloculated rim-enhancing fluid collection within the prostate ,extending to the left seminal vesicle, reaching the left ischiorectal fossa ,left ischioanal fossa and superficial post anal space of the perianal space after traversing the left levator ani muscle.

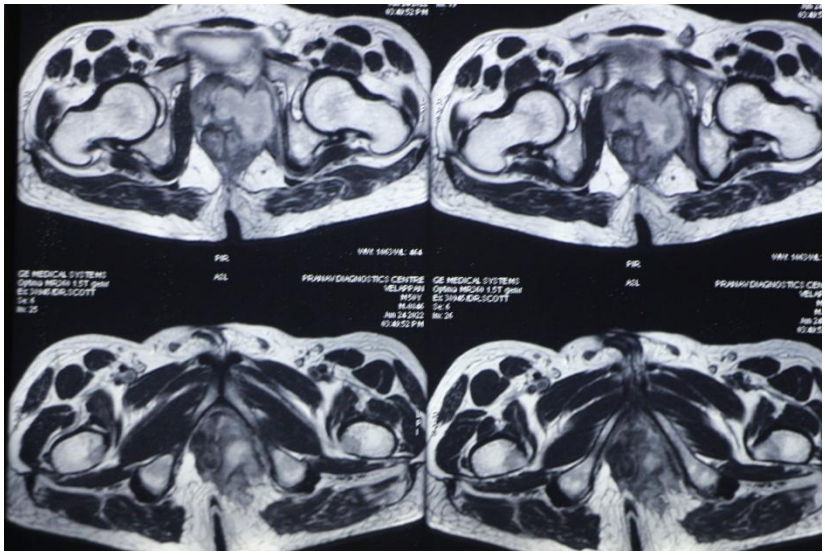

Figure 1: MRI perianal area T_1 Axial image shows Perianal abscess secondary to ruptured prostatic abscess

Figure 2 : Cystoscopic drainage of abscess through prostatic urethra, black arrow points at yellow colored thick pus

Urologist consulted and Cystoscopic deroofing of the abscess cavity done, around 50 ml purulent pus drained .Three-way Foley's catheter was placed for 48 hrs and then changed to two way urethral catheter for 7 days. Broad-spectrum antibiotics piperacillin 4g and tazobactam0.5g in combination with meropenem 1 gm IV 12hrly instituted for 5 days. No growth of specific bacteria made in the pus culture sensitivity assay. Tab.Faropenem 200mg two times a day was prescribed for 2 weeks. He become symptom free in 2 days and totally cured in 3 weeks duration. He is disease free for the past 14 months.

Discussion.

Perianal abscess are usually diagnosed by the signs like perianal swelling, redness, tenderness and the skin thinning at the summit of the tense underlying abscess**.**Perianal abscess secondary to noncryptoglandular origin is rare. Prostatic abscess often diagnosed late as it has spectrum of symptoms from fever, lower abdominal pain, voiding disturbances, pain around anus and perineum. Prostatic abscess is not diagnosed at early stage unless tenderness of the prostate parenchyma elicited by digital rectal fistula also been reported[2].

There are very few cases of prostatic abscess getting ruptured into the perianal spaces are reported. Our case is such a rare presentation. Prostatic abscess due to melioidosis and secondary perianal abscess formation is also reported by chee et al[3].

Pus culture showed no bacteria in our case, perhaps treated outside by antibiotics for 3 weeks .Pyogenic prostatic abscesses can occur due to tuberculosis[4]. The fibrotic form of tuberculous prostatits may mimic carcinoma, whereas in our case the prostate was boggy and tender and also pus doesn't show features of tuberculosis in TB-PCR analysis.

MRI picture of our patient showed extensive abscess formation arising from the left lobe of prostate gland on the posterior aspect, crossing its tough capsule, reaching the supralevator space and then descending into the intersphincteric space then to left ischioanal space through transphincteric(external sphincter) route. Hence the route of spread is exactly the opposite way of cryptoglandular infection. Whereas in cryptoglandular infection, route of spread is from the dentate line to intersphincteric space and then to ischiorectal or ischioanal abscess through external sphincter. Supralevator abscesses are generally hard to diagnose clinically they have unexplained perineal or lower abdominal pain or urinary symptoms[5]. Hence, radiological investigation like CT or MRI of the perianal area can detect an underlying prostatic abscess, its infralevator ani extension to reach perianal spaces[6]

Cystoscopic drainage of prostatic abscess is better than transperianal or transrectal drainage of this atypical complicated perianal abscess. If there is persistent of perianal abscess after Cystoscopic drainage of prostatic abscess, then needle aspiration can be attempted on the summit of the prominence or indurated site or ultrasound guided.

Transperianal route of abscess drainage in this patient would have caused persistent urinary fistula .

Conclusion

Noncryptoglandular etiology of perianal abscess is uncommon, proper history, good examination and appropriate investigation like MRI would clinch the diagnosis. Colorectal surgeon should be aware of such entity while treating perianal abscess. Anorectal abscesses should be assessed properly with history, physical examination, laboratory, and imaging, and rarely underlying causes of inflammation of adjacent organs, such as the prostatic abscess, should be kept in mind. A prostatic abscess usually presents with lower urinary tract symptoms and pain. Rectal, perineal and urethral fistulas can be seen in a prostatic abscess. It is a rare clinical condition to develop an anorectal abscess, as in our case.

References

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