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Emphysematous Prostatitis: A Rare Case Report

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Abstract: *Emphysematous prostatitis (EMP) is a very rare inflammatory condition, characterized by localized collection of gas and purulent exudates in the prostate and carries a high mortality rate. We present a case of 62 year old man admitted with fever and chills , without any urinary complaints or co-morbidities and had none of the usual risk factors for EMP.Imaging revealed a collection within the prostatic parenchyma with air shadowsextending into right pararectal area.Patient was successfully treated with guided aspirationand broad spectrum antibiotics without any complications.*

Keywords : *ANTIBIOTICS , DRAINAGE , EMP , NCCT, TRUS*

I. Introduction

Emphysematous prostatitis (EMP) is a very rare inflammatory condition, characterized by localized collection of gas and purulent exudates in the prostate. It is usually seen in patients with diabetes, bladder outlet obstruction or bladder catheterization and typically presents with fever, irritative LUTS and pelvic or perineal pain.Mortality rate varies between 1% and 16% [1]. We present a case of EMP which had none of the above risk factors and had an atypical presentation.

II. Case Presentation

A 62 year old malepresented with fever and chills to the medicine casualty, he had no other complaints or any associated co-morbidities nor any significant past medical history .

On clinical examination patient was tachypneic, tachycardic, hypotensive and febrile.Chest and abdominal examination were normal .

Routine blood and urine investigations , chest x-ray were unremarkable except for leucocytosis on complete blood counts. Patient was started on antibiotics but showed no improvement for 48hrs.USG abdomen was taken which was did not detect any abnormality except right bulky seminal vesical possibly granulomatous change. Urology consult was taken in view of this incidental USG abdomen findings. Patient denied having any Urological symptoms butdigital rectal examination revealed a tender boggy prostate.

Emergency TRUS revealed a collection within the prostatic parenchyma with air shadowsextending into right pararectal area(fig 1).

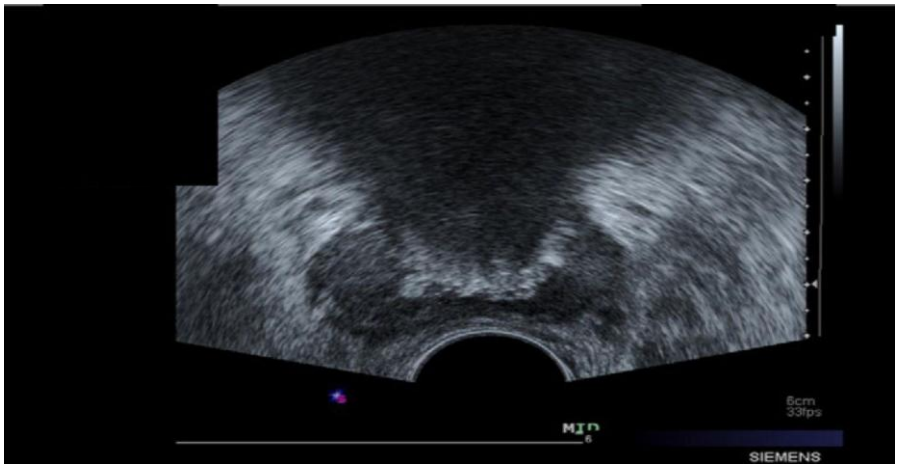

Fig 1

Findings were confirmed with NCCT abdomen pelvis which showed enlarged prostate , with low attenuation well defined lesion , consistent with gas & abscess formatio(fig 2).

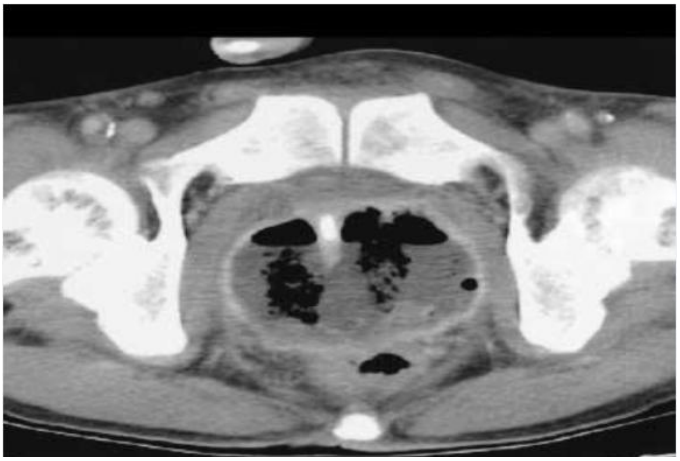

Fig 2

Retrospective review of the x-ray KUB revealed gas shadows in prostatic area which was initially missed (fig 3).

Fig 3

Emergency TRUS guided trans-rectal aspiration was done using 18G needle, about 65 ml purulent material was aspirated. Patient was put on empirical broad spectrum antibiotics untill klebsiella sensitive to Imipenam was isolated from the pus. Patient improved symptomatically and repeat TRUS showed no residual collection.

III. Discussion

EMP is a rare entity. Patients with diabetes,BOO and indwelling catheter are the more prone . Infections by gas forming organisms like E. coli, Klebsiella, Proteus and Citrobacter species occur with increased frequency in thesepatients[2]. The signs and symptoms of EMP are non-specific. Digital rectal examination can reveal an enlarged prostate, however, there are no specific findings suggesting emphysematous infection. Radiography is usually the initial imaging modality used in patients with abdominal pain. Radiography may be helpful in suggesting the diagnosis of emphysematous prostatitis if gas is visualized in the region of prostate. In our patient, this finding was missed on the radiograph, as the gas shadow was mistaken for rectal gas. Ultrasonography is usually accurate in revealing the diagnosis. However, the presence of gas may make visualization of prostate difficult, as in our patient. TRUS is more accurate than transabdominal sonography in making the diagnosis[3]. Apart from Ultrasound guided trans-rectal aspiration of prostate, transurethral , transperineal approachs can also be used in treatment. CT scan is the most sensitive and specific modality to make a diagnosis and should be performed in suspected cases[4].

IV. Conclusion

Mortality due to emphysematous prostatitis is significant and hence early diagnosis and aggressive treatment is imperative [5]. In our case, the early diagnosis was made on TRUS which was performed due to suspecious DRE findings. The diagnosis was initially missed on radiography and sonography in this case; however, in retrospect the typical findings were noted. We were able to successfully manage the patient with emergency TRUS guided trans rectal aspiration and intravenous antibiotics.

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