A RARE CASE OF GRANULOMATOUS PROSTATITIS

DR MANDAKINI B T, DR ABDUL HAKEEM ATTAR, DR ZEENATH B, DR MOINUDDIN M.
Dept. of PATHOLOGY, Dept of SURGERY.
KHAJA BANDANAWAZ INSTITUTE OF MEDICAL SCIENCES, GULBARGA.
Shameem Masala Attar Bazar, Gulbarga – 585101
Email: attar.hakeem@gmail.com

ABSTRACT:
Granulomatous prostatitis is an unusual benign inflammatory condition of the prostate that is rarely reported in histopathology. Clinically it mimics prostatic carcinoma, thus requiring pathological examination for diagnosis. We report a rare case of granulomatous prostatitis which was an incidental finding. Histopathology revealed epithelioid granulomas with Langhans giant cells and central caseous necrosis. Zeihl Neelsen stain for acid fast bacilli, was negative. Despite tuberculosis being very common in India, granulomatous prostatitis associated with tuberculosis is not common. However the genitourinary tract is most common extrapulmonary site of TB infection (33% of cases). Distinction between non-specific and infectious granulomatous prostatitis is important for therapeutic reasons.

KEY WORDS: Granulomatous prostatitis, Histopathology, Prostate, Tuberculosis.

INTRODUCTION
Non-specific granulomatous prostatitis is noticed occasionally in prostate specimens. It was first described by Tanner and McDonald in 1943, who reported an incidence of 3.3% of granulomatous prostatitis in inflammatory lesions. Harsh Mohan et al studied 20 cases of granulomatous prostatitis, of which two were the cases of tuberculous prostatitis (1). Prostate is the organ most commonly involved in tuberculosis of the male genital system (5). Early tuberculous lesions in the prostate are seldom detected on palpation. It is only when the disease is advanced, that enlargement occurs and fluctuant, tender, zones may be felt. Grossly the lesion is usually bilateral. Confluent caseous zones occur with liquefaction and cavitation, until finally the prostate becomes an enlarged mass with multiple cavities (5). Healing with calcification may supervene a change detectable by radiologic examination. In late stages the prostate becomes shrunken, fibrotic and hard, to the point that it may simulate carcinoma on palpation (5).

CLINICAL DETAILS
A 70 years-old man admitted into surgery unit, with history of left inguinal hernia, and features of prostatitis. On Examination, CVS; RS,and CNS were normal. Laboratory investigations including Complete blood count, routine urine tests, and Biochemical tests were within normal limits. The patient had no evidence of past or present pulmonary tuberculosis. On ultrasonography it was diagnosed as a case of benign enlargement and surgery was decided.During exploration, adhesions were found in and around the prostate.Intact median lobe was taken out and sent for histopathological examination.

PATHOLOGIC FEATURES:
GROSS: [Fig-1] - Single, globular mass, measuring 6x4x3cms. External surface was smooth. Cut- surface, lobulated and showed slit- like spaces and grey white solid areas.
fig 01- Photograph of C/S lobulated prostatic mass showing slit like spaces

**MICROSCOPY:** [Fig-2to5] - Sections studied showed prostatic tissue with hyperplasia of the glands and stromal tissue. Stroma showed well defined granulomas with central caseous necrosis surrounded by epithelioid cells, Langhans giant cells and lymphocytes.

fig 02- Photomicrograph showing prostatic tissue with hyperplastic glands, Stroma and granulomas. [H&E 100X].
fig 03 - Photomicrograph showing caseous necrosis. (H&E 400X).

fig 04 - Photomicrograph showing well defined granulomas. (H&E 100X).
DISCUSSION:
Granulomatous prostatitis is noticed occasionally in prostate specimens. The exact etiology of granulomatous prostatitis remains unclear and may in many cases be idiopathic. It is thought that factors involved in its development include duct obstruction and ectasia with leakage of luminal contents into the glandular stroma, which sets up a foreign body reaction with inflammatory change and fibrosis. Granulomatous prostatitis or prostatic abscess caused by Mycobacterium tuberculosis has been previously described in the literature. The genitourinary tract is one of the most common sites of extrapulmonary tuberculosis (30-33%) (4). It is thought that tuberculous involvement of the prostate is usually the result of hematogenous spread (5), though this can also occur as a result of descent of the organism from the kidneys or from local spread from the genital tract (6). Both benign and malignant abnormalities can account for disruption of the normal prostatic architecture. Benign entities previously described with ultrasonography include; benign prostatic hyperplasia (BPH), (3) prostatitis (5) and intraducal dysplasia (intraepithelial neoplasia) (6). The major concern is the possibility of granulomatous prostatitis being mistaken for prostate cancer on several fronts, but specially clinically in more than half of cases (6). In our case, histopathology of the median lobe showed epithelioid granulomas with distinct central caseous necrosis. However AFB could not be demonstrated by Zeihl-Neelsen staining. Post-operatively patient had delayed wound healing, and patient was put on anti-tubercular therapy and responded well, acknowledging the fact that in our case, etiology was infective; tuberculous, granulomatous-prostatitis.

CONCLUSION: Non-specific granulomatous prostatitis is the most common type of granulomatous prostatitis. Despite tuberculosis being very common in India, granulomatous prostatitis associated with tuberculosis is not common. Distinction between non-specific and infectious granulomatous prostatitis is important for therapeutic reasons.

ACKNOWLEDGEMENT:
The work was indeed a mammoth task to accomplish and would not have been possible without active co-operation, constant strategic support and encouragement by our beloved – PRESIDENT- (Khaja Bandanawaz Institute Of Medical Sciences)—DR.SYED SHAH KHUSRO HUSSAINI.
REFERENCES:


