PROSTATIC CYSTS

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Introduction

Cysts of prostate are uncommon and their origin is uncertain. The approach to its diagnosis is by transabdominal or transrectal ultrasound and CT. These procedures help to establish size, margins, locations and its contents. Prostatic cysts include utricular and mullerian duct cysts, cysts of the ejaculatory duct and prostatic retention cysts.

Case Report

21 year old asymptomatic male reported for review following extra corporeal shock wave lithotripsy (ESWL) for right renal calculus. On plain radiograph no radio-opaque calculus was seen. Ultrasound abdomen revealed both renals having normal architecture with smooth outline of urinary bladder. Seminal vesicles were normal. Prostate revealed a well defined unilocular echofree lesion with posterior enhancement measuring 30 mm in diameter (Fig 1). A diagnosis of prostatic cyst was made. CT not only confirmed the finding but revealed the cyst to be lying more to the left and revealed another 11 mm diameter cyst lying laterally well within the prostate (Fig 2). The cysts being asymptomatic conservative management was planned.

Discussion

Clinically patients may present with prostatism, prostatitis, haemospermia or urinary retention [1,2,3].

Fig. 1 : Ultrasonogram shows prostatic cyst lying posterior to the urinary bladder

On the basis of clinical, anatomical and embryological approach, 3 different structures have been listed in the differential diagnosis of prostatic cysts. (a) Cysts arising from mullerian duct and utricle remnants are midline, at the base of the prostate posterior to the bladder neck and do not contain sperms [1,4]. (b) Ejaculatory duct diverticulum is midline in location with presence of sperms in the cyst fluid, and their prevalence increases in infertile men [1,5]. (c) Prostatic retention cyst are usually located laterally, they do not contain spermatozoa and are generally asymptomatic [1,6].

With the advent of ultrasound and CT Scan prostatic cysts are being diagnosed with increasing frequency. These are non invasive imaging modalities and are now easily available. They not only provide information about the cyst itself, but also information about the prostate, seminal vesicles and other adjacent structures. Ultrasonographically guided diagnostic and therapeutic transperineal needle aspiration is well tolerated and provides fluid from the cyst for microscopic and bacteriological examinations [1].

Only solitary prostatic cysts have been described in available literature [1-6] whereas in our case two cysts

Fig. 2 : CT scan reveals two cysts lying within the prostate gland

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were seen in the prostate on CT, they were not midline in position, patient was young in age and asymptomatic suggesting diagnosis of prostatic retention cysts.

Definitive diagnosis of prostatic cyst requires histologic specimen obtained by an invasive procedure. Ultrasound and CT provide full anatomic delineation establishing size, location, consistency and number of cysts. Invasive procedures are best avoided if conservative management is planned.

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