



AN INTRA VESICULAR PROSTATIC MEDIAN LOBE ENLARGEMENT AND ITS CLINICAL IMPORTANCE – A CADAVERIC REPORT

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ABSTRACT

We have observed an Intravesicular enlargement from the prostatic median lobe in a 60 year old male cadaver in the Department of Anatomy, ESIC Medical College & PGIMSRS, Chennai, INDIA. The present cadaveric report considered under grade -3 obstructed type of classification according to the degree of intra vesicular prostatic protrusion. In ultra sound examination; intra vesicular prostatic protrusion more accurate in evaluating bothersome symptom in men with Benign Prostatic Hyperplasia. Our cadaveric report is one of the predicting factors in helping the lower urinary tract symptoms with benign hyperplasia of prostate gland.

INTRODUCTION

Enlarged median lobe may cause relatively more severe symptoms than lateral lobe hyperplasia because it can act as a valve at bladder neck during voiding which may cause severe obstruction [1]. If there were lateral prostatic lobes enlargement; this anatomical condition would cause major infra-vesical obstruction. The periurethral glands are less commonly involved with Benign Prostatic Hyperplasia; if they do become enlarged they can form a median lobe which appears as a tear-drop midline structure at the posterior bladder neck creating severe obstructive voiding symptoms [2]. Histo-pathologic evidence of benign prostatic hyperplasia is present approximately 8% men in their fourth decade and in 90% of men by their ninth decade. Cross sectional studies based on cadaver autopsies or consecutive patients seen in urology clinics suggests that the growth rate decreases with age [3]. The median lobe enlarged benign prostatic hyperplasia in cadaveric report is unique in its clinical condition due to obstructive voiding symptoms.

Case Report

During routine dissection for the medical

undergraduates at ESIC Medical College & PGIMSRS, Chennai, INDIA, In a 60 year old male cadaver we have observed rounded enlargement protruding into the urinary bladder from its neck, the enlargement confirmed as hypertrophy of median lobe of the prostate gland but the lateral lobes of the prostate gland are normal [Figure-1]. We considered this intra vesicular prostatic enlargement as benign prostatic median lobe hyper trophy protruded into urinary bladder. But it is very rare entity report in cadavers because of its clinical condition.

DISCUSSION

Intravesicular prostatic protrusion is caused by the enlarging lateral lobes and the median lobe, and that the protrusion of the enlarged lobes causes a “ball-valve” type of obstruction, thus disrupting the funneling effect of the bladder neck and causing dyskinetic movement of the bladder during voiding [4]. A prostatic mass with greater protrusion causes more severe voiding dysfunction by causing more serious bladder outlet obstruction [5, 6]. Increased intravesicular prostatic protrusion can affect the storage symptoms caused by stimulation of the bladder [7,



8]. Mariappan et al. reported that those patients with an IPP above 10 mm would present a 6 times higher risk for failed trial without transurethral catheter[9]. Recently several studies reported the importance of anatomical factors in evaluating men with Lower Urinary Tract Symptoms. Prostatic configuration - Intravesicular protrusion of prostate, bladder weight and bladder wall thickness are new clinical indices which are helpful in predicting Bladder Outlet Obstruction [10]. Our cadaveric report is one of the

predicting factors in helping the lower urinary tract symptoms according to the literatures. Bladders with an IPP of 5mm or less were classified as grade 1 (unobstructed), those with 5 to 10 mm as grade 2 (equivocal), and those greater than 10 mm as grade 3 (obstructed) [10]. The present cadaveric report in agreement with the grade 3 obstructed type of classification.

Fig 1. Intra vesicular enlargement of prostatic median lobe (UB: Urinary Bladder; PU: Prostatic part of Urethra; LL: Lateral lobes of prostate)



Fig 2. Intra vesicular enlargement of prostatic median lobe (UB: Urinary Bladder; U: Ureter; K: Kidneys; M: Intra vesicular median lobe enlargement)



CONCLUSION

Benign prostatic hyperplasia is not life-threatening illness; it adversely affects quality of life. Intravesicular median lobe enlargement plays a key role in evaluation of benign prostatic hyperplasia and also lower urinary tract symptoms. The present report is very rare entity in cadavers because of its clinical condition.

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