

CASE REPORT

SIMPLE INFLAMMATORY PARAURETHRAL CYST: A CASE REPORT

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INTRODUCTION: Paraurethral cyst is an uncommon and may be congenital or acquired. Presenting symptoms include a palpable or visible mass, pain, dyspareunia, dysuria, a distorted voiding stream, and a vaginal discharge. Paraurethral cyst affects 1% to 6% of the female population between 20 and 60 years of age. **CASE REPORT:** A 23 year old patient came with complaints of dysuria, dyspareunia and swelling in the vaginal region since 6 months, size being gradually increasing in size to the present size of 4x 4 cms giving a picture of paraurethral cyst. Ultrasonography was suggestive of a simple cyst and rest all investigations were in normal limits. During surgery, a unilocular cyst adherent to the urethral wall on the right side was appreciated. **DISCUSSION:** In this case, it was typically diagnosed upon physical examination, although ultrasound was used to confirm. We conclude that paraurethral cysts in adults are benign lesions that respond well to simple marsupialization, with no recurrence. The major risk factor in the present patients was pregnancy and vaginal delivery, but cysts can occur in nulliparous women.

KEYWORDS: Paraurethral cyst, Ultrasonography.

INTRODUCTION: The paraurethral cyst is uncommon and may be either congenital or acquired. Presenting symptoms include a palpable or visible mass, pain, dyspareunia, dysuria, a distorted voiding stream, and a vaginal discharge¹.

Paraurethral cysts may be totally asymptomatic and discovered during routine pelvic examination. Paraurethral cyst affects 1% to 6% of the female population between 20 and 60 years of age. Urethral diverticula account for approximately 80% of paraurethral cyst-like lesions.^{2, 3} Paraurethral cysts are considerably less frequent. Because of their usually asymptomatic character, paraurethral cysts are rarely diagnosed and treated, and reports available in databases are relatively scarce. However, the presence of cysts may cause recurrent genitourinary symptoms. Symptomatic cysts are an indication for surgical treatment.

CASE REPORT: A 23 year old patient came with complaints of dysuria, dyspareunia and swelling in the vaginal region since 6 months, size being gradually increasing in size to the present size of 4x 4 cms. Ultrasonography was suggestive of a simple cyst and rest all investigations were in normal limits. During surgery, a unilocular cyst adherent to the urethral wall on the right side was appreciated. On compressing the cyst a yellow serous discharge drained from the urethra which was not possible earlier due to tremendous pain on previous such attempts without anesthesia. Cyst was removed & sent for histopathology. Rent in urethra was sutured with vicryl 3-0 and the dead space obliterated with the same. Patient was catheterized and catheter kept for 7 days. Patient was discharged after 7 days and was asymptomatic at follow up. Histopathological report of the cyst was confirmed it as a simple inflammatory cyst of a paraurethral region.

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DISCUSSION: Paraurethral cysts in women are classified primarily as acquired or congenital, although a clear distinction often is difficult. Congenital paraurethral cysts arise from the various embryological components and vestigial remnants of the vagina and the female urethra⁴. Acquired inclusion cysts of the surface epithelium have been reported as the most common cystic lesion of the vagina⁵, often thought to be secondary to the trauma of childbirth or caused by iatrogenic surgical trauma, e.g. episiotomy. Microscopically, the cysts usually are lined by stratified squamous epithelium and may contain caseous or purulent material.⁴

The cyst usually presents itself as a soft, oval and mobile mass. Sometimes the tension of the cystic wall suggests the presence of a solid tumor. Therefore, differential diagnosis of paraurethral tumor-like lesions should take into consideration numerous cystic and solid structures, such as: urethral diverticula, ectopic ureterocele prolapse, leiomyomas, squamous cell carcinomas, neurofibromas, etc.^{4,6}



Figure 1 & 2 Shows 4x4 cms Paraurethral Cyst

The exact etiology of paraurethral cysts is not known. Exposure to maternal estrogen has been reported as a possible cause for development of paraurethral cyst but there is no documented report of maternal exposure in any of the reported cases in the English literature.⁷ For persistent cysts or cases where intervention is required, drainage of the cysts by aspiration, unroofing and marsupialization have all been tried with success.

Skene's ducts are the largest of 30 paraurethral ducts that empty into the female urethra. Occasionally, duct obstruction may lead to a periurethral cyst which presents as an interlabial mass. A normal vaginal introitus can be seen below the cyst. Moreover, a paraurethral cyst contains a milky-fluid if aspirated. The paraurethral glands and ducts that empty into the female urethra are rudimentary homologues of the prostate. Paraurethral glands secrete a mucus-like substance that provides lubrication to the urethral meatus, particularly in response to sexual stimulation.⁸

Paraurethral gland cysts are rare congenital abnormality which present as an interlabial cystic mass in new-born girls. The true incidence of this anomaly is not known. The reported incidence varies from 1 in 2074 to 1 in 7242 female births⁹. Usually physical examination of external genitalia is diagnostic but ultrasound can be used to facilitate in narrowing down the differentials.

CONCLUSION: The incidence of paraurethral cysts may be higher than reported. It is typically diagnosed upon physical examination, although ultrasound may be used to confirm. We conclude that

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paraurethral cysts in adults are benign lesions that respond well to simple marsupialization, with no recurrence. The major risk factor in the present patients was pregnancy and vaginal delivery, but cysts can occur in nulliparous women.

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