INTRAVESICAL RUPTURE OF OVARIAN DERMOID CYST

(A Case Report)

by

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Wallace as early as 1700 originally described the symptoms of this clinical entity. Clade in 1895 published 32 cases of dermoid tumours with bladder complications but, he did not clearly mention the origin of these tumours. Germain in 1909 reviewed 24 cases of dermoid tumour, of which fifteen were ovarian in origin and had extended into the bladder.

Since the original work of Germain, 28 cases of dermoid tumour, mostly of ovarian origin, rupturing into the bladder have been reported sporadically so far (Dandia 1967). The same author also reported one case of ovarian dermoid cyst with rectovesical fistula. The present case of dermoid tumour with extension into the bladder seems to be worth presenting.

Case Report

Mrs. S. S. aged 25 years, married Hindu female, Para 4 + 0 was admitted to Eden Hospital on 3-12-70. The patient stated that one day she pulled out a black hair which was protruding through her urethral opening during her last pregnancy of 8 weeks' duration. Fifteen days afterwards a very small hair ball was expelled out during micturition. Thereafter, she had no other complaints and the delivery was uneventful at home on 3-7-1969. She did not take medical advice either for her pregnancy or for the above mentioned complaint. Two months after childbirth she again noticed protrusion of a black hair per urethra. The patient made several unsuccessful attempts to pull it out which resulted in onset of pain and slight haematuria. Few days afterwards she attended Eden Hospital O.P.D. and was admitted for proper investigation.

The patient had 4 normal pregnancies and uncomplicated child-births. She was of average health. On abdominal examination no abnormality was detected. Local examination of vulva revealed protrusion of a black hair of 1½" in length through the urethra, which was extracted with gentle force. The patient complained of slight pain followed by slight haematuria.

On bimanual examination, uterus was found to be normal in size, anteverted and mobile. Right and left fornices were clear. A firm mobile, globular mass about 1½" x 1½"' separate from the uterus was felt through the anterior fornix. Suspicion of either an intravesical tumour or a foreign body inside the bladder was made. Plain X-ray of the pelvis (Fig. 1) and cystogram on 9-12-1970 revealed a smooth, round, intraluminal filling defect in the urinary bladder. Diagnosis was? hair ball in the urinary bladder.

Cystoscopic Exam. on 26-12-1970— showed lots of whitish plaque on the surface of the intravesical swelling on posterosuperior surface of the bladder. Diagnosis was? bladder stone.

As the diagnosis remained disputed even

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after relevant laboratory investigations, surgical intervention was decided.

Operation Note: On 6-1-1971 suprapubic transverse incision was made and the bladder was approached extraperitoneally. Bladder was opened. A mass 1½″ x 1½″ was felt and seen in posterosuperior wall of the bladder. The surface of the mass was smooth and appeared like an ovarian dermoid with hair on it. The mass was excised. The bladder was repaired. Another mass was felt on the peritoneal surface at the same site. Peritoneum was opened. Right ovary was found to be slightly enlarged with an irregular surface. Right ovary and right tube were stuck over the wall of urinary bladder inseparably. The uterus, the left ovary and the left tube were healthy. The right ovary and the right tube along with adherent portion of the bladder were excised. Bladder was again repaired in layers. Peritoneal cavity was closed. Wound was closed in layers.

Post operative period was uneventful except slight leakage of urine through abdominal wound on 8th postoperative day which subsequently healed.

Pathological Report: Macroscopic (Fig. 2) (A) The mass excised from the bladder was round with hair on the external surface. The cut surface showed fatty tissue and teeth embedded in the fatty tissue. (B) Right ovary 2″ x 2″ without irregular surface. Right Fallopian tube—normal.

Histopathological Report: (A) The mass excised from the bladder showed the structure of a dermoid cyst. (B) Right ovary showed structure of dermoid cyst. Right Fallopian tube—normal.

Discussion

References of dermoid tumour with extension to the urinary bladder are found in the world literature sporadically. Eighty-five such cases could be traced in the available literature so far. The incidence of ovarian dermoid tumour with bladder complications is not definitely known. From the available literature the collected figure of such condition is found to be 38. In others either the origin of the dermoid could not be determined or it was not clearly mentioned.

In this particular case, the dermoid cyst had the origin from right ovary. The following hypothesis can be advanced as regards its intrusion in the vesical cavity. The dermoid cyst of right ovary was in the utero vesical pouch and underwent partial twist with consequent adhesion to the bladder wall. During previous labour, the tumour which was in the pelvis and was causing obstruction, might have been pressed by the advancing part of the foetus with consequent rupture into the bladder. The patient missed the acute symptoms of rupture as it happened during labour. Next time, when she got pregnant, the tumour was well established in the bladder and the gravid uterus might have been responsible for causing pressure.

Besides intravesical rupture of dermoid cyst of the bladder (primary or secondary from the ovary or other site) the other possibility of a palpable mass in the pelvis is bladder stone, formed around hair introduced per urethra. Straight X-ray or cystogram will give identical picture in both the cases. Cystoscopic examination helps a lot to arrive at a diagnosis, although surgical intervention confirms the clinical condition.

Summary

A case of intravesical rupture of an ovarian dermoid cyst has been reported.

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See Figs. on Art Paper III