

VESICO PARIETAL FISTULA DUE TO SPONTANEOUS RUPTURE OF BLADDER DURING PREGNANCY

by

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Introduction

Spontaneous rupture of the bladder through the anterior abdominal wall is an extremely uncommon complication of pregnancy. However it may occur as a consequence of incarceration of a retroverted gravid uterus in neglected cases. We are reporting here an unusual case of vesico-parietal fistula resulting from prolonged retention of urine due to impacted retroverted gravid uterus.

CASE REPORT

Mrs. S., 26 years old, expecting her 6th baby was admitted in Sir Sunder Lal Hospital, Banaras Hindu University on 31st December, 1973 with history of 4 months' amenorrhoea, acute abdominal pain, associated with distension of abdomen and retention of urine for one week.

She had normal and regular cycles since menarche i.e. 12 years of age and her last normal menstruation was on 1st September, 1973.

She had 5 full term normal deliveries and last child birth was two years previously.

On examination she appeared to be very toxic with marked dehydration, sunken eyes, dry tongue and rapid pulse. Her blood pressure was 110/70 mm of Hg.

Abdominal examination revealed cellulitis over a large area of the lower abdominal wall with a big discharging abscess in the centre (Fig. 1). The discharge from the abdominal wound was markedly offensive and urinous. The whole of the lower abdomen was extremely tender.

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Pelvic examination revealed normal vulva and vagina. The cervix was soft and bluish and was pushed up high anteriorly. A soft mass filling the whole brim of the pelvic cavity and bulging posteriorly was felt on bimanual examination which felt like a pregnant uterus.

A diagnosis of incarcerated retroverted gravid uterus leading to retention of urine followed by spontaneous rupture of bladder was made.

Investigations: Haemoglobin 8.0 gm%. Total W.B.C. count 18000/cmm. D.L.C. Increase in Polymorphs. Blood urea 75 mgm%. Serum electrolytes within normal range. Urine (catheter specimen) Apparently full of pus cells, R.B.C. and highly infected. Urine culture Mixed growth of *E. coli* and *B. proteus* both sensitive to chloromycetin. I.V.P. Did not reveal any abnormality. Cystography Showed the fistulous track from bladder through the anterior abdominal wall (Fig. 2).

Management

After admission she was put on continuous catheter drainage and chloromycetin—250 mgm. 6 hourly.

On the day following admission the large abdominal abscess burst spontaneously shedding a portion of anterior bladder wall and exposing a large opening into the bladder, with free escape of urine through the abdominal wound.

Since the uterus was jammed in the pelvis, it was felt necessary to evacuate the uterus vaginally which was carried out after 7 days of antibiotic therapy. Following this the abdominal wound gradually healed completely over a period of 7 weeks. On discharge, pelvic examination did not reveal any abnormality and midstream specimen of urine was sterile.

Discussion

William Hunter (1754) was probably the first to describe and explain such a case in details in British Medical litera-

ture. The commonest cause of acute retention of urine during pregnancy is retroverted gravid uterus. Retention occurs when the uterus grows to 12-14 weeks' size. Spontaneous correction of uterus usually occurs within 24-48 hours after continuous bladder drainage but when the uterus is incarcerated rectification may not occur. In such cases abortion may occur and symptoms may be alleviated. But if the retention persists for 24 hours or more the bladder wall may be so damaged that necrosis and spontaneous rupture may occur and severe infection of the urinary tract may supervene

In an experimental study Mehrotra (1953) has shown that haemorrhages in bladder wall occur at an early stage of distension and it may involve all the coats of bladder wall if acute distension persists for 24 hours. The epithelial lining of the bladder mucosa is thinned out and broken at places. These tears and rupture of mucosal haemorrhages favour infection. Guyon & Albarran (1890), Barlon (1893), Shigematsu (1928) and Creevy

(1934) have suggested that increase in intravesical tension and overstretching of the blood vessels in the wall of the urinary bladder are responsible for the interference in the vesical circulation and for damage produced in the bladder wall. Such damage if persistent may cause complete dehiscence of a portion of the bladder.

Summary

A case of spontaneous rupture of the bladder leading to vesicoparietal fistula due to incarcerated retroverted gravid uterus is presented.

References

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See Fig. on Art Paper VIII