

# RUPTURE OF A VEIN OVER A UTERINE LEIOMYOMA

(A Case Report)

by

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Rupture of a vessel on the surface of a leiomyoma is a rare complication. Only a countable number of cases have been reported in the world literature. Bosch *et al* (1950) called it 'a rare surgical emergency' and were able to collect only 51 'bonafide' cases from the world literature till 1950. Hasskarl (1949) has reviewed these cases. Paucity of report of this entity prompted us in reporting this case.

## Case Report

Mrs. P. C., primigravida, aged 24, married for one year, was admitted on 25th December, 1968, at King Edward VII Memorial Hospital, Bombay, with the complaint of pain in the abdomen for 3 days. There was no history of vomiting, fever or bleeding per vaginam. The patient gave a history of two and a half months' amenorrhoea. The past menstrual history was within normal limits.

On examination, there was no pallor. The pulse rate was 80 per minute and blood pressure 110/70 mm. On systemic examination, nothing abnormal was detected.

Abdominal examination revealed a firm and tender swelling, about 2" x 2" in size,

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in the suprapubic region, arising from the pelvis.

On vaginal examination, the uterus was found to be retroverted and enlarged corresponding to 10 weeks' gestation. The mass which was palpable per abdomen could be palpated through the anterior fornix. A groove was palpable between the uterus and the mass. Hingorani (1966) test was negative, suggesting the connection of the tumour to the uterus. In this test, the patient is given a head low position. In the case of an ovarian tumour, the mass regresses upwards and there is a clear delineation between it and the fundus of the uterus. A clinical diagnosis of red degeneration of the fibroid was entertained and the patient observed accordingly. The laboratory investigations were as follows: Hb. 11 gms. per cent; W.B.C. 13,000/cmm.; urine nothing abnormal detected; V.D.R.L. negative; blood group 'A', Rh positive.

On 27th December, the patient had an acute attack of abdominal pain and appeared rather pale.

An exploratory laparotomy was carried out as a differential diagnosis of a twisted ovarian cyst was kept in mind. At laparotomy, a subserous fibroid about 4½" in diameter was seen arising from the right cornual end of the uterus. One of the vessels on its upper border had given way. There were about 100 ml. of blood in the peritoneal cavity. Myomectomy was carried out and the uterus sutured in two layers. Post-operatively, the patient was given Inj. Progesterone and Duvadilan. Her convalescence was satisfactory and she carried the pregnancy till term.

Specimen:—The fibroid measured 4½" in diameter. Two vessels were seen run-

ning on its surface. The one at the upper pole, near the posterior wall had given way and fresh blood was seen oozing from it. The cut surface of the fibroid showed a reddish brown appearance.

### Discussion

Although there are quite a few cases of fibroid complicating pregnancy, it is only occasionally that one encounters rupture of a vessel over these fibroids in pregnancy. This suggests that there is a special predisposition to this complication.

Credit goes to Rokitansky for reporting the first case of its type in 1861. Brunner (1910, as quoted by Hasskarl, 1949) detected the condition pre-operatively and collected 10 cases. Ernst and Gammeltoft (1922, quoted by Hasskarl, 1949) and Polacco (1932, quoted by Hasskarl, 1949) reported further cases. The remaining literature on this subject comprises of reports from German, French, Spanish and Scandinavian literature and 18 additional reports in English.

Bosch *et al.* (1950), reviewing these cases, made the following observations. For a vessel over a fibroid to rupture, the fibroid should be of a large size and hence its higher incidence in older patients (30-50 years). Sudden increase in intra-abdominal pressure also predisposes to it. Increased vascularity, as is seen during menstruation and pregnancy, also makes the patient with a fibroid more vulnerable to this complication. Five patients amongst the series of 50 cases presented by Hasskarl (1949) were pregnant at the time of the catastrophe. Only two were nulliparous.

The condition is characterised by acute onset of abdominal pain with

increasing pallor, suggestive of internal bleeding in a patient, known to be having an abdominal tumour. However, one-third of the patients reported by Hasskarl (1949) were not aware of the abdominal tumour.

The entity of rupture of a vessel over a fibroid usually goes unrecognised and is misdiagnosed as ruptured ectopic pregnancy, twisted ovarian cyst or fibroid, acute appendicitis or rupture of a viscus.

Hasskarl (1949), reviewing the world literature, made an important observation. In the majority of cases, the ruptured veins were on the posterior wall of the fibroids, where they come in contact with the sacral promontory.

The management is surgical, comprising of myomectomy, hysterectomy or suturing of a ruptured vessel. The mortality of 4 per cent (1948) compared to 26 per cent (upto 1928) speaks for not the accuracy of the diagnosis, but for the improvement in resuscitative measures.

In the present case, the diagnosis of rupture of the vein over the fibroid was incidental. The laparotomy was done with a possible diagnosis of a twisted ovarian cyst. The red degeneration of the fibroid may have been the cause of the abdominal pain at the time of admission. The aggravation of the symptoms just prior to the laparotomy might have resulted from rupture of the vessel over the fibroid. May be this patient might have settled down with conservative line of treatment. The laparotomy was done only because the differential diagnosis was a twisted ovarian cyst. Many cases of a ruptured vein over a fibroid might not

have been detected or reported if the amount of blood loss as a result of the complication is not significant.

#### Summary

A case of rupture of a vein over a fibroma in pregnancy has been reported.

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