TORSION OF THE PREGNANT UTERUS

by

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Review of literature and discussion

In most of the reported cases torsion of the gravid uterus was associated with congenital anomalies like unilateral and bicornuate uteri (Shah *et al*, 1968; Jangalwalla and Bandi, 1971).

The increased incidence of this rare complication with the developmental anomalies is due to the absence of supporting structures on one side, unilateral uteri being longer and narrower, with poor muscular and perineal attachments, these factors imparting undue and excessive mobility, makes them prone to undergo torsion. In the normal uterus the round ligament and broad ligament being attached to both sides of the uterus, prevent excessive mobility and rotation.

The authors like Nesbit and Corner, Robinson and Duval, Shah, and Jungalwalla, and many others have discussed the other possible aetiological factors for torsion in normally developed pregnant uteri in different trimesters of pregnancy. According to findings in their own cases and the reviews of literature it appears that in the presence of predisposing factors like myoma, ovarian cyst, pendulous abdomen with diastasis of recti, transverse lie and others, asymmetry of normally developed pregnant uterus occurs which makes it prone to torsion of varying degree (90 to 540 degrees) under the effect of one or more of the activating factors like sudden bodily movement, jerky bodily movement like rolling over in a bed, contraction of the abdominal muscle during domestic duties like scrubbing the floor and washing clothes, which exert a variable and unequal pressure upon the underlying uterus to promote torsion; which is normally resisted by the efficient ligamentary attachment and the anatomical relationship to neighbouring organs. At times, variations in the attachment of placenta, foetal movements and even uterine contraction can contribute to the axial rotation by producing asymmetry of the organ.

The diagnosis of this rare condition is missed because there are very few externally manifested features which can be considered as characteristics of this peculiar condition only. In early months it simulates ectopic gestation and in the later months abruptioplacentae. However, some of the following features like presence of loose, flabby, pendulous abdomen with transverse lie, along with history of sudden voilet pain and evidence of shock in absence of vaginal bleeding, tenderness of abdomen on palpation, can help the Clinician to suspect this rare accident. Palpation of round ligament and spiralling of the vagina along with above clinical features are considered diagnostic of this condition. But the key to diagnosis is in being aware of the high probability of this rare condition especially in those cases where there is transverse lie, pendulous abdomen and the socio-economic condition of the patient makes heavy demands on her to do physical labour involving jerky

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bodily movement or there is a past record which suggests the presence of congenital anomalies of the uterus.

The present case with a torsion of 180 degrees having a living foetus and viable uterus without any sign and symptom of acute abdomen, is like a medical curiosity and a pre-operative diagnosis is very difficult in such a case. Nesbit and Corner have found five asymptomatic cases out of analysis of 107 cases in the literature. Since then there is no record of such asymptomatic cases in the literature.

The failure to recognise the torsion on laparotomy in such asymptomatic cases, will be disastrous because if the abdomen is closed without correcting the torsion, there will be gangrene of the uterus and all its sequelae in the post-operative period.

From the experience of this single case, and the review of literature it seems logical to suggest that one should always look for this rare condition in cases of transverse lie with pendulous abdomen in woman from poor socio-economic group and also in cases of congenital anomalies of the uterus, even in the absence of symptoms of acute abdomen.

The exact surgical procedure to be adopted in a particular case will depend upon the condition of the mother, condition of the foetus and the findings at laparotomy. If the foetus is alive (as in the present case) it should be delivered by caesarean section, if possible after correction of the condition, otherwise without correction (as in the present case) rather than wasting time in restoring normal anatomy. The other corrective measures should be taken up later. There is no mention in the literature about the role of plication of the round ligament which was done in this case, on account of its laxity and in the hope of achieving a permanent anteversion which might prevent torsion in subsequent pregnancy. Corr (1943) has reported a case where torsion occurred in both first and second pregnancy.

Where viability of the uterine musculature is doubtful, sub-total hysterectomy is the treatment of choice but where the colour of the uterus is normal and further child bearing is desirable caesarean section should be done whether foetus is alive or dead.

This case has been managed conservatively with the preservation of uterus and right tube and ovaries after the removal of left fimbrial cyst, by left salpingectomy because the uterus and remaining adnexal structures were perfectly normal and healthy, and patient was keen to have further reproduction. The follow-up of this case upto date has not shown any complication. The occurrence and course of future pregnancy and laparotomy finding in next caesarean section is yet to be seen.

Summary

A case of torsion of pregnant uterus which was accidently diagnosed during elective caesarean section has been reported for the following reasons:

(1) This case with a torsion of 180 degree had no feature of acute abdomen or history of dull dragging pain throughout pregnancy,

(ii) Inspite of the presence of transverse lie, gross pelvic contraction and association of fimbrial cyst all of them having important role in the production of torsion, this case can be considered as a case of medical curiosity because the mother had no symptom and the foetus was alive in the presence of such extreme degree of torsion.

The absence of symptom with such degree of torsion could be due to slow

and gradual onset of this condition during the last trimester, which did not affect the blood supply of the uterus and the placenta and the time of elective caesarean section luckily coincided with the completion of torsion hence alive foetus and viable uterus could be obtained.

(iii) The uterus has been preserved for future child bearing which will give a chance to see the effect of the treatment (plication of the round ligament) and special method of peritonisation of the scar on the posterior surface of the lower segment of the uterus.

(iv) The experience of this case emphasizes the importance of looking for torsion in cases of transverse lie with pendulous abdomen even in the absence of symptom of acute abdomen.

References

1. Corr, J. E.: Amer. J. Obst. & Gynec. 46: 749, 1943.
2. Jungalwalla, B. N. and Bandi, S.: J. Obst. & Gynec. India. 21: 516, 1971.
3. Nesbit, R. E. and Cornor, C. W.: Obst. & Gynec. Surv. 11: 311, 1956.
4. Robinson, A. L. and Duval, H. M.: J. Obst. & Gynec. Brit. Emp. 38: 55, 1931.
5. Shah, S. H., Nanavati, S. and Sequeira, E. J.: J. Obst. & Gynec. India. 18: 746, 1968.
6. Shastrakar, V. D. and Devi, P. K.: J. Obst. & Gynec. India. 11: 228, 1960.
7. Virchow, R.: Die Krankbaften Geschulste, 3, 1863 Quoted by Shah, S. H. et al: J. Obst. & Gynec. India. 18: 746, 1968.