Rupture of the Uterus

Pages with reference to book, From 171 To 171

Talat J. Hassan (PMRC Research Centre, Institute of Urology and Transplantation, Karachi.)

Rupture of the uterus is seen in two forms, separation of previous surgical scar or rupture of an intact uterus. These two entities differ greatly in Incidence and severity; the latter being exclusively a problem of developing countries[1-7]. Sequelae of rupture of previous scars vary according to location of scar. Surgical scars may be due to previous caesarean section or other procedures like myomectomy, injury by perforanon (as during curettage), cornual resection or plastic procedures for double uterus. Rupture of an intact uterus usually occurs in lower segment as a result of iatrogenic trauma, which may be pharmacological, instrumental or manual. Oxytocin is well known to contribute to uterine rupture and Hassan et al1 found it to be the second commonest cause of uterine tears. Spontaneous rupture of intact uterus may also occur as a result of neglected labour usually in undeveloped countries[1,2]. Groen[8] reported an incidence of 1 rupture per 112 deliveries in rural Nigeria. In 46.4% of cases the cause was cephalopelvic disproportion. Undoubtedly this type of situation occurred all over the world at an earlier time but has declined considerably in the Western World. In developed countries rupture is mainly due to dehiscence of previous caesarean section scar as a large proportion of women requesting pregnancy termination in the second trimester can be expected to have had previous caesarean section due to increasing use of abdominal delivery[9]. Although rupture of a previous low- transverse cervical scar during succeeding labour is a rare occurrence, an association of previous uterine surgery, invasive placenta (accreta, increta or percreta) and uterine rupture is well recognized[10]. Incidence of uterine rupture in United States is 1/2500 deliveries[11]. Grand multiparity, although considered as a causative factor in spontaneous rupture, is not encountered in developed countries[12] whereas in developing countries main victims of uterine rupture are grand multipara in third decade of life[1]. They probably have a false sense of security about the ease of vaginal delivery and avoid hospital facilities for ante-natal and intra-natal care. The traditional birth attendants (TBAs) attending them are also unaware of their being high risk patients and refer them to hospitals late in labour (as seen by their position on partogram at the time of their admission to the hospital[1]). If pregnant mothers and TBAs are made aware of the risks of this condition, a large number of uterine tears and their resultant morbidity and mortality can be avoided in our country. In our country the basic problem, besides unawareness and malnutrition[6], appears to be non availability of standard obstetric services to middle and low socioeconomic groups, for over 80% of mothers sustaining uterine tears had no ante-natal care[1,13], a situation prevalent for the last 20 years[14]. Maternal mortality of 3.9% in a 7-year series appearing in this issue is not very discouraging. Only mothers with lateral uterine ruptures and ruptures of broad ligament and those admitted moribund, died, rest were saved due to timely and appropriate aggressive management. Maternal mortality of 8.9%[15] and foetal mortality above 50% in most of the series have been reported from U.S. Foetal mortality of 17.6% has been reported from Karachi in cases sustaining injury within the hospital[1]. Significantly low maternal and foetal mortality, in cases admitted early in labour in general hospital, are ample proof that good obstetric services are present but they are not used by the middle and low socioeconomic groups either due to unawareness of their importance or due to social customs, or they are not available to them for different reasons, including transport difficulty. Possibly, all above factors operate collectively to maintain a high frequency of this obstetric catastrophe in our country which varies from 1 in 71" to 1 in 189 deliveries[1].

References

1. Hassan, Ti., Korejo, it, Jafarey, 5.N. Rupture of the uterus in full term pregnancy. J. Pat Med.Assoc., 43:172-73.
2. Fatihallab, N.S., Al-chalabi, HA, Al-Dahan, F.H. Rupture of pregnant uterus. Med.J.Basrah University, 1988;7:41-53.
3. Rendle-Sbort, CW. Rupture of gravid uterus in Uganda. Am.J.Obstet.Gynecol., 1960;79:1114-20.
4. Heij, H.A., Tevelde, ER. and cairns, J.M. The treatment of rupture of the pregnant uterus.Analysis of 93 cases treated in srursl hospital in Zambia. Int.J.Gynaecol.Obstet 1984;22:415-20.
5. Sheth, 5.5. Suturingof the tearss treatment in uterine rupture. Am.J.Obstet.Gynecol., 1969;105:440-43.
6. Krishna, M.M.K Rupture of the uterus; a review of 164 cases. J.Obstet.Gynaecol., 1962;69:18-26
7. Rstib, M., Tsher, 0., Ssbagh, T.O. Ruptured uterus still an obstetric problem. Saudi Med.)., 1987;8:495-98.
8. Groen, G.P. Uterine rupture in rural Nigeria, Review of 144 cases. Obstet. (JynecoL, 1974; 44:682-87.
9. Andrew, B. and Robert, 3.5. Previous cesarean section, placenta, increta and uterine rupture in second-trimester abortion. Am.J.Obstet.Gynecol., 1983;145:766-67.
10. Fox, H. Placenta sccrets 1945-69. Obstet.Gynecol. Sun'., 1972;27:475-79.
11. Harris, BA Genital tract injury; diagnosis and management of obstetric emergencies Ch.17 Ed. Hsssam B. Fadel. Mdison Wesley PublishingCompany, London, 1982;4214-31.
12. Palerme, G.R. and Friedman, BA Rupture ofthegrsvid uterus in the third trimester. Am.J.Obstet.Gynecol., 1966;94:571-76.
13. Ssmsd, N. Rupture uterus, diagnosis and management. Specialist, 1985;1:65-68
14. Jafsrey, S.N. Rupture of uterus. EditoriaL J.Pak.Med.Assoc., 1973;23:219-20.
15. Beschsm, W.D., Beschsm, D.W., Webster, H.D. et aL Rupture of the uterus at New Orleans charityHospitsl. Am.J.Obstet.Gynecol., 1970;106:1083-97.