A- 12: Influence of erect lateral pelvimetry and fetal weight on trial of scar

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With ever increasing caesarian section rates, attempts have been made to allow vaginal delivery in mothers with one previous scar. Pelvic capacity and fetal size are 2 important determinants of success in trial of scar. This study attempts to address the usefulness of erect lateral X-ray pelvimetry and ultrasound determined fetal weight on the outcome of attempts at vaginal delivery following a previous scar.

A prospective study over a period of 2 years was carried out on all patients with a previous lower segment caesarean section admitted to a Teaching Hospital professorial unit. All patients underwent an erect lateral X-ray for pelvimetry and ultrasound scan was carried out after the 37^{th} week of gestation for fetal weight estimation.

Patients data with pelvimetry findings, ultrasound estimation of fetal weight, outcome of trial of scar, birth weight and neonatal outcome were entered in Epi info version 6 statistical programme for epidemiology and analysed. If any of the anteroposterior diameters were less than 10cm or the estimated fetal weight was more than 3800g a trial of scar was not attempted.

Out of 193 patients admitted with one previous scar, 39 were selectively sectioned. Elective induction of labour was avoided. The remaining 154 patients were allowed to go in to spontaneous labour. Inadequate progress of labour prompted augmentation with oxytocin in 27 patients. Successful vaginal delivery was achieved in 122 patients (73%).

According to the anteroposterior diameters, the 154 patients were divided into 4 pelvic size groups. The success rates among the 4 groups was similar. However in each pelvic size group the birth weight influenced the outcome of the trial of scar. There was significantly high failure rate among mothers who delivered babies above 3500g. Antenatal estimate of fetal weight correlated well with the actual birth weight.

Among our obstetric population, contracted pelvis as indicated by radiological pelvimetry is rather rare. Successful vaginal delivery following trial of scar was influenced by the birth weight which correlated well with antenatal ultrasound estimation of fetal weight. Radiological pelvimetry although necessary to exclude contracted pelvis did not have a significant influence on the outcome of trial of scar.