

## **Introduction and Aim of Work**

There has been an increase in cesarean section rate over the past 20 years, which is not uniform but associated with wide variations between and within countries (Sachs et al., 1999). The overall cesarean delivery rate increased from 18.0% in 1994/95 to 22.1% in 2000/01. The primary cesarean delivery rate increased from 12.7% to 16.3%. The largest increase in repeat cesarean deliveries was due to elective repeat cesarean sections, which increased from 37.7% to 40.3. Also, the rate of vaginal deliveries following forceps rotation declined from 1.9% in 1994/95 to 1.3% in 2000/01 (Liu et al., 2004). Therefore, Kolas et al. (2003) emphasizes the importance of handling the first pregnancy carefully and of avoiding unnecessary abdominal deliveries.

For many years the scared uterus was believed to contraindicate labor out of fear of uterine rupture, (Cunningham et al., 2001). The management of cesarean section (C.S.) causes much controversy among health care providers, patients and insurers. The maternal and neonatal morbidity risk increased when vaginal birth after previous cesarean section (VBAC) attempts fails which emphasizes the importance of careful case selection. Also the risks of uterine rupture and neonatal mortality were significantly increased (Biswas, 2003).

However a trial of vaginal birth after previous C.S. was reported to be a safe and practical method to reduce rate of C.S. A non recurrent indication for previous C.S. such as breech presentation or fetal distress is

associated with a much higher successful rate of VBAC than recurrent indications such as cephalopelvic disproportion (CPD). Even with history of CPD two thirds of women will have successful VBAC. Also prior vaginal deliveries are excellent indicators of successful VBAC especially if vaginal delivery follows the prior C.S. (Brill and Windrim, 2003).

Because morbidity is more common in those with a failed trial of labor, the accurate prediction of the likelihood of having a successful or a failed trial of labor has become an important area of obstetric research (Macones et al., 2001).

To develop a scoring system to predict the likelihood of vaginal birth in patients undergoing a trial of labor after previous cesarean delivery using factors known at the time of hospital admission, will be so valuable in patient counseling (Flamm and Geiger 1997).

The benefits associated with a trial of labor in the patient with a prior cesarean birth far outweigh the risks. The policy of “once a cesarean section, always a cesarean section” should be abandoned. Carefully selecting the indication of trial of labor and monitoring the labor course are very important for increasing successful vaginal delivery rate and reducing repeat cesarean section (Ling and Xu, 1995).

Ultrasonographic evaluation of the lower uterine segment thickness of pregnant women with a previous cesarean deliveries may determine a critical thickness above which safe vaginal delivery is predictable. Close observation and proper registration are of utmost importance and would allow easier and safer decision (Sen et al., 2004).

## **Aim of work**

1. To assess the value of ultrasonographic measurement of thickness of lower uterine segment in pregnant women with previous single cesarean section and its predictive value for the risk of intrapartum uterine rupture.
2. Estimation of the success rate of trial of labor in patients with previous one C.S. with spontaneous onset of labour.
3. Predictors of success.
4. Set up of protocol for trial of labour after one C.S.