

## VAGINAL DELIVERY AFTER CESAREAN SECTION.

Rubina Bashir and Khurshid Khattak

Department of Gynaecology, Ayub Medical College, Abbottabad

**Methods:** This retrospective study was conducted in Women & Children Hospital, Abbottabad to determine the outcome of subsequent labour in women with a previous cesarean section for a non recurrent cause. **Results:** From 1<sup>st</sup> January, 1996 to 31<sup>st</sup> Dec. 1998, 260 patients with a previous lower segment C. Section were admitted out of which 120 patients were selected for trial of labour. 108 (41.53%) patients had a successful vaginal delivery while 12 (4.62%) ended up with a secondary C. Section, indicating a success rate of 90%. **Conclusion:** This study proves that vaginal delivery is possible in carefully selected patients with lesser maternal morbidity.

### INTRODUCTION

The dictum once a caesarian section always caesarian section no longer holds true.

Several studies suggest that in women with prior caesarian section for a non recurrent cause, a trial of labour is safer than elective repeat Caesarian section.

This tendency to resist caesarian arose from the wish not to compromise a patients Obstetric future, because the dictum "Twice a Caesarian section always a caesarian section" than holds true.

For successful delivery after a previous caesarian section the Obstetrician requires to have the expertise to carefully select the patients, for trial of labour because rupture of scar can endanger the life of both mother and her child. There has been a steady rise in the rates of caesarian section both in the UK and throughout the world<sup>1</sup>.

More than 90% of women with a history of previous low transverse section are delivered by repeat caesarian section in the united states<sup>2</sup>.

Successful trial of labour shortens the duration of hospital stay and gives more patients satisfaction<sup>3</sup> plus the complications associated with the surgical procedure are also eliminated.

We conducted this study to determine the out come of trial of labour in women with a previous C.Section for a non recurrent cause.

### MATERIALS AND METHODS

This retrospective study was conducted in the Women & Children Hospital from 1<sup>st</sup> Jan, 1996 to 31<sup>st</sup> Dec. 1998. During this three year study period we received 260 patients with a previous low segments C. Section. All such patients were thoroughly evaluated regarding parity, indication for previous LSCS, birth weight and neonatal outcome.

Patients selected for trial of scar were thoroughly evaluated by a consultant and were provisionally prepared for LSCS. The labour was closely monitored. Strict FHS record was kept. Progress of labour was monitored on regular basis and when necessary labour was augmented with oxytocin. Patients were vigilantly monitored for scar tenderness or delay in progression of labour and if needed immediate LSCS was done.

### RESULTS

Out of 260 patients with previous LSCS 120 were carefully selected for trial of scar. Trials of labour were mostly of spontaneous onset. Of these 108 (41.53 %) had successful vaginal deliveries while 12 (4.62 %) had a repeat LSCS. Of the 108 successful vaginal births 14 were assisted either by vacuum<sup>6</sup> or outlet forceps<sup>8</sup>.

**Table –1: Management of subjects (n=260)**

Procedure	Total Patients	Percentage
<b>1. Elective C Section</b>	140	53.84
<b>2. Trial of Labour</b>	120	
<b>3. Vaginal delivery</b>	108	41.53
i. Spontaneous	94	(87.00)
ii. Instrumental	14	(13.00)
<b>4. Secondary C Section</b>	12	4.62

12 patients in the study groups ended up with secondary C.Section indications being fetal distress (5) 47.66% delay in descent (4) (33.3%) and scar tenderness (3) 25 %.

Uterine rupture was found in 1 case. The patient had delay in decent of the fetal head and scar tenderness for which secondary LSCS was done, during the procedure bloodless scar dehiscence was found without further maternal or fetal morbidity.

Maternal morbidity as indicated in table-3 was found to be much lower in cases with vaginal delivery as compared to those delivered

by secondary LSCS. This was mainly due to infections like endometritis, urinary tract infections and pulmonary infections which were found to be more common in cases with emergency LSCS.

**Table-2: Indications for Secondary LSCS (n=12)**

Indications for secondary LSCS	Total patients	%
Fetal Distress	5	41.66
Delay in Descent	4	33.3
Scar Tenderness	3	25.0

**Table-3: Maternal Morbidity**

Complications	Vaginal Delivery	Secondary LSCS
Endometritis	1 (0.92%)	2 (16.66%)
UTI	2 (1.84%)	3 (25%)
Pulmonary Infections	2 (1.84%)	5 (47.66%)
Wound Infections	0	3 (25%)
Anemia	4 (3.68%)	6 (50%)

## DISCUSSION

The study demonstrates that trial of scar is possible in carefully selected patients with a nonrecurring indication for previous LSCS. There are some absolute contraindications to allowing an attempt at vaginal delivery, such as classical scar, previous vesicovaginal fistula, previous ruptured uterus, severe Cephalopelvic Disproportion and malpresentation in current pregnancy.

If the indication for previous LSCS has been nonrecurring e.g malpresentation, antepartum hemorrhage, fetal distress, severe pre-eclampsia, or mild to moderate dystocia. If a reliable history confirms a lower segments scar and an uncomplicated postoperative recovery then vaginal delivery should be attempted<sup>4</sup>.

Our study showed a success rate of 90% in 120 patients attempting a trial of labour. Several studies<sup>5,6</sup> also demonstrate similar results. The factors to be weighed in the balance are the risk to the mother of repeating the cesarean section and the risk to her and her child of rupture of the scar if labour is allowed. In our study out of 120 patients selected for trial of scar we had only one case of scar dehiscence. Peel and chamberlain<sup>7</sup> made the important observation that the incidence of scar rupture increases in patients allowed to attempt vaginal delivery after a Cesarean section for disproportion. Other unfavorable factors tending to increase the risk of scar rupture are sepsis following operations and implantation of placenta beneath the scar in subsequent pregnancy which can be ruled out by Ultrasound. A thorough counseling of the

patients is essential and woman should understand, however that in the event of obstructed labour or fetal compromise it will be necessary to perform caesarian section.

Careful supervision of labour is essential, although induction of labour should be avoided if possible. Oxytocin may be administered with caution. Progress of labour should be assessed by repeated abdominal palpation, vaginal examinations and progress recorded on partographs. FHS should be auscultated regularly. It is mandatory that labour should be conducted in hospitals with facilities for emergency LSCS. Digital examinations of the integrity of the scar after delivery has been advocated but there is risk of introducing infections and creating a defect. So following delivery, digital exploration of scar is best avoided. In the absence of abnormal bleeding evidence of its benefits are inconclusive<sup>8</sup>.

## CONCLUSION

In our set up where health education is lacking and patients compliance is poor the risk of ruptured uterus due to unattended deliveries in cases of scarred uterus is high, plus increased economic burdens on the family due to longer hospital stay in case of operative delivery. It is worthwhile to reduce the incidence of repeat LSCS in carefully selected patients to reduce maternal morbidity and mortality.

## REFERENCES

1. Lomas J. Holding back the tide of Caesareans. *BMJ* 1988, 29M: 569-570.
2. Duff P, Southmayd K, Read JA. Out come of trial of labour in patients with a single previous low transverse Caesrean section for dystocia. *Obstet Gynecol* 1988, 71: 380-384.
3. Jongen V.H.W.M, Halfwerk M.G.C, Brouwer W.K.. Vaginal delivery after previous Caesarean section for failure of second stage of labour. *British Journal of Obstetrics and Gynaecology* October 1998, Vol. 105, PP. 1079-1081.
4. Vaginal delivery after Caesarean section in Sub-saharan Africa. *British Journal of Obstetrics & Gynaecology* Dec. 1997, vol. 104, PP. 1335-1338.
5. Hoskins IA, Gomez JL. Correlation between maximum cervical dilatation at Cesarean delivery. *Obstet Gynecol* 1977;89:591-593.
6. Clerk SL, Eington GS, Beall M, Phelan JP. Effect of indication for previous Cesarean section on subsequent delivery outcome in patients undergoing a trial of labour *J. Reprod Med.* 1984;29: 22-25.
7. Peel J.H and Chamberlain G.V.P (1968) *J.Obstet, Gynec. British. Cwlth*, 75, 1282
8. Browne ADH, MC Grath J. Vaginal delivery after previous Caesarean section. *J.Obstet Gynaecol Br Emp* 1965, 72:557-563