Original Research Paper

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TRIAL OF LABOUR AFTER CESAREAN SECTION

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ABSTRACT **Background:** As in recent studies there is increase in caesarean section rate there is also upcoming question of how to manage subsequent pregnancy after previous caesarean section. To reduce repeat caesarean section rate vaginal birth after caesarean section has been proposed, Aims to the of study is to assess the predictive factors of successful VBAC and study the risks and benefits involved due to VBAC.

Material & method: In this prospective study patient with previous caesarean section who were admitted for confinement at the Department of Obstetrics and Gynaecology in our tertiary care institution from June 1, 2018 to May 31, 2019 were randomly selected for study.

Result: Out of the 200 pregnant patients with previous caesarean section ,maximum number of VBAC where is 15 % and registered patient 92.50% with age group of<25 years with pregnancy interval of>1.5 year.

Conclusion: Trial of labour after previous caesarean section in our study we observed that with increase in maternal age and baby birth weight there were increase in rate of caesarean section.

KEYWORDS : Trial of labour after caesarean section with fetomaternal outcome.

INTRODUCTION

During recent time increase in rates of primary caesarean section is probably due to identification at risk fetus before term, high risk pregnancy, rising rates of induction of labour & failure of induction and decline in operatives vaginal(mid forceps ,vacuum) facilities, vaginal breech delivery[1,2] and increase diagnosis of fetus distress and safer anaesthesia, better operative techniques and easy availability of blood, and fear of medico legal of obstetric practice. The best circumstance for a woman to undergo labour after having a previous caesarean section is when the balance of risks and chances of success are acceptable to both the patient and the obstetrician. There are certain conditions which can make VBAC less likely if TOLAC is attempted; including advanced maternal age, a high body mass index, a high birth weight, abnormal placenta and assess other feto maternal risk factars, There can be risk of uterine rupture and other complications; therefore home birth is contraindicated for all women undergoing TOLAC[2]. at our institution, trial of scar is offered to patients with history of non recurrent indications in previous LSCS, no cephalo-pelvic disproportion, fetal malformation, abnormal placenta, in present pregnancy after ruling out contracted pelvis and no history suggestive of bad uterine scar.

AIMS AND OBJECTIVES:

- To determine the criteria for selecting patients with previous caesarean section for vaginal delivery or repeat caesarean section
- To analyse the mode of delivery in patients of previous caesarean section and feto maternal outcome in each cases

MATERIALS & METHODS:

- 200 Cases of pregnancy with previous caesarean section who were admitted for confinement at the Department of Obstetrics and Gynaecology in our tertiary care institution from June 1, 2018 to May 31, 2019 were randomly selected for study.

The inclusion criteria for study were

- Beyond 28 weeks of gestation
- With previous lower segment transverse scar
- With maternal age > 18 years and < 40 years
- With interpregnancy interval > 12 months

The exclusion criteria were

- Below 28 weeks of gestation
- With previous classical scar
- With previous myomectomy or fundal surgery of uterus.
- Maternal age <18 years and >40 years
- Interpregnancy interval < 12 months

OBSERVATION AND DISCUSSION

Total 200 Cases of pregnancy with previous caesarean section who were admitted for confinement at the Department of Obstetrics and Gynaecology in our tertiary care institution from June 1, 2018 to May 31, 2019 were randomly selected for study.

[1.1] Age distribution and outcome of pregnancy

Age Group [AGE]	Total [N-200]	Other study Total [N=150]	Vaginal Delivery		Gurpreet Kaur Nandmer study[5]		Repeat CS		Gurpreet Kaur Nandmer Study[5]	
			No	%	No	%	No	%	No	%
<25	93	20	12	12.90	11	55.00	81	87.10	09	45.00
26-30	79	78	14	17.42	31	39.75	65	82.28	47	60.26
31-35	19	48	03	15.79	16	33.33	16	84.21	32	66.67
36-40	09	04	01	11.11	1	25.00	08	88.89	03	75.00

The age of patients in the present study ranged between 18 to 40 years, maximum numbers of patients were in the age group of <25 years. Maximum cases of VBAC were in the age group 26-30 years while the least cases of VBAC were of the age group 36-40 years. Thus, in the present study, there was an increase in the rate of caesarean section with increase in the maternal age. This is in accordance with the studies of Gurpreet Kaur Nandmer, et al[5].

[1.2] Antenatal visits and Mode of Delivery

	Vaginal Delivery		Repeat CS		Total
Status	No	%	No	%	
Registered	024	12.97	161	87.03	185
Emergency	006	40.00	009	60.00	015

In the present study, out of the 200 cases of previous caesarean section, 92.50% were registered cases with at least one antenatal visit at our hospital while 7.5% presented at our hospital for the first time. Many of these cases were referred to our hospital from other hospitals for tertiary care.In the present study, out of the registered patients, 12.97% delivered vaginally while about 87.03% underwent a repeat caesarean section.the high rates of caesarean section among registered patients can be attributed to the following causes Recurrent indications of caesarean section ,Co- existence of two or more non recurrent indications , Over optimal monitoring and management of patients with previous CS, To circumvent the untoward events those arise during TOLAC. among the emergency patients, a striking 40% delivered vaginally and 60% underwent a repeat CS, the main reasons being, Patients presenting to the health care facility in advanced stages of labour, Patients being referred to our health care facility for low birth

weight (The hospital being a tertiary care centre which also provides NICU care to preterm babies)

[1.3] Inter pregnancy interval and mode of delivery:

Interval Between Previous CS and Present Pregnancy	PRESENT PREGNANCY				TOTAL
	VD		REPEAT CS		
	NO	%	NO	%	
<=1.5 year	003	03.00	015	25.5	018
>1.5year	027	97.00	155	74.5	182

In the present study, maximum rates of successful VBAC took place in the patients with inter pregnancy interval of >= 1.5yr (97.00%) the maximum number of patients fell in this category

[2]No of previous cs in present study

No. OF CS	Cases[n=200]	%
Primary CS	162	81.0
Previous CS	035	17.5
Previous 2CS	003	01.5

Out of the 200 patients with previous caesarean section 81% had undergone primary CS while 17.5% and 1.5% had a history of previous 1CS and previous 2CS respectively. the increase no of previous CS is more risk for VABC

[3] Indications of Previous CS and Mode of Delivery

Indication of previous CS	Total No. N=200	Mode of delivery In index pregnancy				Kumudini Pradhan Study[9]	Vardhan Shakti study[10]
		VD		Repeat CS		VBAC	VBAC
		No	%	No	%	%	%
Abnormal lie or presentation	27	03	11.11	24	88.89	13.54	-
CPD	36	00	0	36	100	18.75	-
Cord around neck	08	04	50	04	50	-	-
Cord Prolapse	01	00	0	01	100	-	-
Eclampsia	01	00	0	01	100	01.04	-
Epilepsy	01	00	0	01	100	-	-
Fetal distress	29	04	13.79	25	86.21	46.88	41.70
Induction Failure	01	00	0	01	100	-	-
NPOL	29	09	31.03	20	68.97	-	-
Oligohydramnios	25	05	20	20	80	16.67	-
PIH	15	02	13.33	13	86.67	-	02.60
Placenta previa	01	00	0	01	100	01.04	-
Postdatism2	11	01	9.09	10	90.91	-	-
Previous 2CS	03	00	0	03	100	-	-
PROM	07	01	14.29	06	85.71	-	-
Scar tenderness	04	00	0	04	100	-	-
Twins	01	01	100	00	0	-	-

In the present study, among the patients had undergone previous CS for cord around neck, 50% delivered vaginally in the index pregnancy. 31.03% of the patients with NPOL and 13.79% patients with fetal distress as indications of previous CS delivered vaginally in the present pregnancy. This is accordance with Kumudini pradhan study[9] and vardhan Shakti study[10] Among all the patients those underwent a successful TOLAC(VBAC) ,31.03% had NPOL,14.29% had PROM and 13.79% had fetal distress each as the indication of previous CS.Most common indication of CS in previous pregnancy for which TOLAC was offered in index pregnancy was NPOL (31.03%)

[4]Relation between Apgar Score and Mode of Delivery
Apgar score (at 5 min) and Mode of Delivery

Mode of delivery	cases	Apgar score<8	
		No	%
Vaginal Delivery	030	009	30.00
Repeat CS	170	035	20.58
Total	200	044	22.00

with the mode of delivery, among the 200 neonates, 22.00% had an Apgar score of less than 8 at The Apgar score at 5 minutes after birth was calculated for each neonate and was correlated 5 minutes after birth. Among the vaginal delivery group, 30% had an Apgar score less than 8 while among the repeat CS group, 20.58 had Apgar score less than 8 at 5 minutes, the higher rates of low Apgar score in the neonates born through vaginal delivery can be attributed to higher rates of prematurity and hence higher rates of respiratory distress

CONCLUSION:

Despite the guidelines laid by various obstetrics and gynecological societies' regarding trial of labour in pregnancies with previous caesarean section, the art of VBAC is seldom practised. All this has led to an increase in the rate of repeat caesarean sections in post caesarean pregnancies, repeat caesarean section on the other hand is the best approach for management of patients having recurrent indication of primary caesarean section or associated obstetric risk factor

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