Original Article

TREND OF REPEAT CESAREAN SECTION AFTER PREVIOUS ONE LSCS AT FATIMA MEMORIAL HOSPITAL LAHORE TWO YEARS STUDY

F Monnoo Khan, S K Naeem and Rizwan Akhter

Abstracts: The cesarean section rate has been increasing both in developed and undeveloped world. The study was conducted in order to analyze factors leading to repeat cesarean section and to elaborate on "Preventable Factors" under given conditions.

Duration: Two years (January 2007 to December 2008)

Methods: This study was conducted in Obstetric and Gynaecology Department of Fatima Memorial Hospital from January 2007 to December 2008. A total of 119 patients with history of previous one lower segment cesarean section (LSCS) who underwent repeat lower segment cesarean section (LSCS) were analyzed and included in the study.

Results: Out of 119 CASES, 75 (63%) were elective and 44 (37%) were emergency Lower segment cesarean section (LSCS).

Keywords: Lower segment cesarean section (LSCS); Elective (LSCS) Lower segment cesarean section

Introduction

In the past three decades, rate of cesarean section has risen dramatically and repeat cesarean section contributes upto 30%.¹ Recognizing preventable factors is one solution to limit rising cesarean section rate² which improves maternal and neonatal outcome.

The study was conducted to highlight absolute indications, emergency inevitable indications, as well as relative indications. The preventable risk factors were picked up to justify the further management amongst these cases.

Material and Methods

]This retrospective study was conducted in Obstetrics & Gynaecology department Unit II of Fatima Memorial Hospital, Shadman Lahore from January 2007 to December 2008. A total of 119 patients were selected with previous one Lower segment cesarean section (LSCS).

Inclusion criteria involved previous one low transverse cesarean section from non-recurrent cause and singleton pregnancy.

Results

During the study period, a total of 119 patients were included. The results are as below.

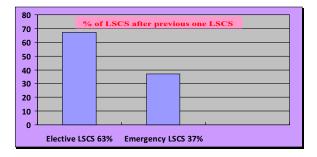


Fig. 1: Breakup of nature of LSCS after Previous One LSCS

Table-1: Indications for Elective LSCS

Variable	Number of Case	Percentage
Post date	11	9.24%
Bad Obs. History	08	6.72%
PIH (Pregnancy induced hyperten	sion) 10	8.40%
PROM (Preterm rupture of memb	ranes) 06	5.04%
IUGR (Intrauterine growth retarda	tion) 08	6.72%
Breech	08	6.72%
Transverse Lie	05	4.20%
Anomalousbady	02	1.68%
Good size baby	03	2.52%

CPD (Cephalo pelivic disproportion)	03	2.52%
Chronic hypertension	02	1.68%
Polyhydramnios	02	1.68%
Placental PRAEVIA	03	2.52%
Placental abruption	03	2.52%
Myomectomy	01	0.84%
Patients request	01	0.84%

Table-2: Indications for Emergency LSCS

Variable	Number of Case	Percentage
Failure to progress	11	8.40%
PROM	06	5.40%
Irregular pains	10	8.40%
Breech in labour	06	5.04%
Transverse lie	03	2.52%
Grade -II Meconuim	04	3.38%
Variable decelerations	04	3.38%
Post dates	14	0.84%

Discussion

The cesarean section rate has been increasing both in developed and undeveloped World during the past three decades.¹ Although the World Health Organization recommends that there is no justification to increase a cesarean section rate in excess of 10-15%, it may be difficult to maintain this rate in tertiary care centers, catering to a large population of transferred high risk cases.

An evaluation of cesarean section by the American College of Obstetricians and Gynaecologists reported that first time mothers with term singleton cephalic pregnancies and women with previous cesarean section account for greatest increase in rates of cesarean section and much of variation between institutions.² Higher rate of cesarean section are associated with increased maternal and neonatal morbidity.

However it is important task of a clinician to counsel the patient regarding pros and cons of vaginal birth after lower segment cesarean section.⁴ In case previous cesarean section is being converted to a repeat section, it should be justified with a valid scientific indication for a subsequent abdominal delivery.⁵

In this study, 63% of patient underwent elective cesarean section and 37% underwent emergency

cesarean section. The leading indications for elective lower segment cesarean section (LSCS) was post dates. However, there was no uniform standardized criteria for the cut-off value to define abdominal delivery of post dates patients. Hence almost all the post dates patients were elective lower segment cesarean section unless in labour. This call for a protocol setup for such patient.

Pregnancy induced hypertension included the second largest group of patient in elective cesarean group, which is self explanatory as it affects neonatal outcome in high risk patients.⁶

In the emergency group, ten (8.40%) of cesarean section were done due to failure to progress of labour and irregular pains. However this is an ill-defined terminology. It is prudent to monitor progress of labour according to graphical presentation by partograph, thus decreasing rates of cesarean section.⁷ Hence in the absence of properly monitored partograph, adequate analgesia, maintenance of hydration status with proper counseling, the rates shown here may also have been over diagnosed.

For certain absolute indication like transverse lie and breech presentation, it is worthwhile to attempt external cephalic version at 37 weeks of gestation. However in our setup, most of these attempts either became hazardous or unsuccessful. Repeat cesarean section for placenta praevia are justified because of obvious reasons. Cases of inevitable emergency cesarean including fetal distress, placental abruption are self explanatory.

Hence in order to reduce the rates of lower segment cesarean section (LSCS), it is worth while to carry out audits and to assess intrinsic role of caesarian section influencing fetomaternal outcome. This will lead to development of protocol system in managing the mode of delivery in patients with previous one lower segment cesarean section (LSCS).

Department of Obstetrics & Gyneacology Unit II, Fatima Memorial Hospital and College of Medicine & Dentistry Lahore theesculapio@hotmail.com Www.sims.edu.pk/esculapio.html.

References

- 1. Scott JR. Avoiding labor problems during vaginal birth after cesarean delivery. Clin Obster Gynecol. 1997;40:533-541.
- Martin JA, Hamilton BE, Sutton PD, et al. Births: final data for 2002. Natl Vital Stat Rep. 2003;52:1-113.
- Mark B. Landon, M.D., John C. Hauth, M.D., Kenneth J. Leveno, M.D. Maternal and Perinatal Outcomes Associated with a Trial of Labor after Prior Cesarean Delivery Volume 351:2581-2587 December 16, 2004.
- 4. John Zweifler, MD, MPH, Alvaro Garza, MD, MPH, Susan Hughes, MS, Vaginal Birth After Cesarean in California: Before and After a Change in Guidelines. Obstetrics & Gynecology 2006;107:1226-1232. 2006 by the American College of Obstetricians and Gynecologists.
- Loebel G, Zelop CM, Egan JF, Wax J. Maternal and neonatal morbidity after elective repeat cesarean delivery versus a trial of labor after previous cesarean delivery in a community teaching hospital. J Matern Fetal Neonatal Med. 2004 Apr; 15(4): 243-6.

- Hibbard JU, Ismail MA, Wang Y. Failed vaginal birth after cesarean section: how risky is it? I. Maternal morbidity. Am J Obstet Gynecol. 2001 Jun; 184 (7): 1365.71; discussion 1371-3.
- Hashima JN, Guise JM. Vaginal birth after cesarean: a prenatal scoring tool. Am J Obstet Gynecol. 2007 May;196(5): e22-3.
- Gonen R, Tamir A, Degani S. Variables associated with successful vaginal birth after one cesarean section: a proposed vaginal birth after cesarean section score. Am J perinatol. 2004 Nov;21(8):447-53
- Landon MB, Leindecker S, Spong CY. The MFMU cesarean Registry: factors affecting the successf of trial of labor after previous cesarean delivery. Am J Obstet Gynecol. 2005 Sep;193(3 Pt 2): 1016-23.
- Hibbard JU, Gilbert S, Landon MB. Trial of labor or repeat cesarean delivery in women with morbid obesity and previous cesarean delivery. Obstet Gynecol. 2006 Jul;108(1):125-33.
- Landon MB, Spong CY, Thom E. Risk of uterine rupture with a trial of labor in women with multiple and single prior cesarean delivery. Obstet Gynecol. 2006 Jul;108 (1):12-20.

- Javed Iqbal, Fauzia Nausheen, Fozia Ali Bhatti. Vaginal birth after Cesarean section (VBAC). Ann King Edward Med Coll June 2004;10(2):187-189. Jinnah Hospital Lahore.
- Ghufrana Umer Memon, Ghazala Ahmed Azam. Vaginal birth after Cesarean section. J Surg Pakistan Dec 2005;10(4):34-7. Dow University of Health sciences & Civil Hospital Karachi.
- Rubina Sohail, Nyla Mehboob, Farrukh Zaman. Trends of delivery in patients with previous one cesarean section J Surg Pakistan Mar 2004;9(1):39-41. Department of Obstetric & Gynecology Postgraduate Medical Institute Lahore.
- Cahill AG, Stamilio DM, Odibo AO. Is vaginal birth after cesarean (VBAC) or elective repeat cesarean safer in women with a prior vaginal delivery? Am J Obstet Gynecol. 2006 Oct;195(4):1143-7. Epub 2006 Jul 17.
- 16. Grobman WA, Lai Y, Landon MB. Development of a nomogram for prediction of vaginal birth after cesarean delivery. Obstet Gynecol. 2007 Apr;109(4):806-12.