An Appraisal of Caesarean Section for Twin Pregnancies in a Private Hospital in Southeast Nigeria

NLMC GJMR Classification
WQ300,WA900

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Abstract-

Background

Caesarean section is central to the management of high risk pregnancies but may be associated with life threatening complications. In Nigeria, the private hospitals play key roles in healthcare delivery and hence there is need for periodic review of their practice.

Objective

To determine the indications and outcome of caesarean sections done for Twin pregnancies in Grace Specialist hospital, Onitsha over a 7-year period

Method

The records of patients with multiple gestations delivered through caesarean section between 7th January 2002 and 7th January 2009 were retrospectively analyzed using Epi info, version 2005

Result

Fifty five patients out of 227 patients with twin gestation were delivered through caesarean section (24.2%) but 49 case files were available for analysis. The leading indication for caesarean section was previous caesarean section (28.6%), followed by mal-presentations (18.4%) and severe pre-eclampsia/eclampsia (12.2%). Maternal morbidities were encountered in 13 patients (26.5%) and constitute mainly of febrile illness (16.3%) and postpartum anemia (12.2%), wound sepsis (8.2%). The perinatal mortality rate(PMR) was 81.6% and there was no maternal death.

Conclusion

Caesarean section is safe and useful in the management of Twin gestations. Continued effort is required to maintain safety of the operation in the country.

Keywords: Caesarean section, twin pregnancy, perinatal mortality, Nnewi

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I. Introduction

The term caesarean section describes the delivery of the baby through a surgical incision on the uterine and anterior abdominal walls.[1] The operation is usually employed in cases where vaginal delivery is not feasible or would impose undue risks to the mother or fetus and can be done either as an elective or emergency procedure. In Nigeria, caesarean section rates varies from 11.4% to 34.7%.[2-4] The common indications for caesarean section in the country are cephalopelvic disproportion, fetal distress, antepartum haemorrhage as well as previous caesarean section. Twin pregnancy is a high risk pregnancy associated with increased perinatal mortality. To reduce this associated high perinatal mortality, a liberal use of caesarean section in multiple pregnancies had been advocated. [5,6] As most studies focus on the general indications and outcome of caesarean section, it is necessary to study the trend of, and outcome of the surgery in cases of twin pregnancies.

II. Materials and Methods

This is a retrospective seven year study of all cases of caesarean section done on account of twin gestation in Grace Specialist Hospital and Maternity Onitsha, Anambra State Nigeria between 7th January 2002 and 6th January 2009. The records of the patients were retrieved from the records department and analyzed with Epi info, version 3.3.2. The information obtained included sociodemographic profile, indications for, and outcome of surgery.

III. Result

Fifty five patients out of 227 patients with twin gestation were delivered through caesarean section (24.2%) but 49 case files were available for analysis. The sociodemographic profile of the patients is shown in table i. Most of the patients (67.3%) belong to the age group of 20-29 years. About half (51.0%) of the patients were multiparous and 44.9% and 42.9% of them had secondary and tertiary education respectively. They were mainly students (42.6%) and traders (34.7%). As shown in table ii, the leading indication for caesarean section was previous caesarean section (28.6%), followed by mal-presentations (18.4%) and severe pre-eclampsia/eclampsia (12.2%). Maternal morbidities were encountered in 13 patients (26.5%) and constitute mainly of febrile illness (16.3%) and postpartum anemia (12.2%), wound sepsis (8.2%). (Table iii) The

perinatal mortality rate (PMR) was 81.6 per 1000 live births and there was no maternal death.

IV. Discussion

When compared to singleton pregnancies, multiple gestation is associated with a higher rate of caesarean section. 7,8 The caesarean section rate for twin gestation of 24.2% found in this study is higher than 10.6% reported in nearby Afikpo, Ebonyi State but lower than 60% and 41.3% found in Niger delta and Jos respectively.9,10 The leading indication for caesarean section was previous caesarean section, followed by mal-presentations and severe pre-eclampsia/eclampsia. Previous caesarean section was also reported by Onwuzurike et al 8in Enugu as the leading indication for caesarean section in multiple gestations.This high contribution of previous caesarean section to the high rate of caesarean section among women with multiple gestation may be attributable to the reluctance in our center to conduct vaginal birth after one previous caesarean section (VBAC) among women with multiple gestation. Vaginal delivery after a previous caesarean section is safe but patient must be closely monitored. Among singleton pregnancies in our environment, the leading indication for caesarean section is cephalopelvic disproportion/poor progress, fetal distress and obstructed labour while majority of elective surgeries are done on account of previous caesarean section. 4,11 Postoperative complications were recorded in 26.5% of patients and constituted mainly of minor complications such as febrile morbidity and postoperative anaemia. The perinatal mortality rate (PMR) was 81.6 per 1000 live births and there was no maternal death. This good outcome may be attributable to the fact that majority of these surgeries were done by the specialist Obstetrician.

V. Conclusion

Caesarean sections for twin gestation during the period under review were carried out mainly on account of previous caesarean section and were associated with minimal morbidity and no mortality.

VI. Reference

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Tables

Table i: sociodemographic characteristics of the respondents

sociodemographic characteristics	N=49	
Age		
<20	5	10.2
20-29	33	67.3
30-39	10	20.4
≥40	1	2.1
Parity		
0	12	24.5
1	8	16.3
2-4	25	51.0
≥5	4	8.2
Highest educational level		
Primary	6	12.2
Secondary	22	44.9
Tertiary	21	42.9
Occupation		
Student	21	42.6
Trading	17	34.7
Civil servants	8	16.3
House wife	3	6.1
Religion		
Catholic	20	40.8
Pentecostal	15	30.6
Anglican	14	28.6

Table ii: indications for caesarean section

Complications	No	%
Febrile morbidity	8	16.3
Postpartum anemia	6	12.2
Genital tract infection	3	6.1
Wound sepsis	3	6.1
Urinary tract infection	2	4.1
Primary postpartum haemorrhage	2	4.1
Malaria	2	4.1
Respiratory tract infection	2	4.1
Total	13	26.5

*some patients had more than one complication