Incidence of Cesarean Section for Breech Presentation at Lady Willingdon Hospital

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Breech presentation is associated with high incidence of operative delivery, either due to the cause which leads to the breech presentation ,fetal distress or fear of stucking the after coming head Our study is intended to look for the current rate of the operative delivery, cause for cesarean section, feto-maternal out come and options to reduce operative delivery in case of breech presentation . 685 out of the 939 breech cases in our study were delivered by the cesarean section. It means 72.9% being delivered by the operative approach which is exceptionally high. There were 15 pregnancy losses all in the unbooked cases (9 stillbirths, 5 early neonatal deaths and one late neonatal death) Recommendations are early booking, regular follow-up visits and ECV (external cephalic version) at 36 weeks. Elective cesarean section at 37 weeks in cases with absolute indication for operative delivery. Vaginal delivery by senior personnel in selected cases (after ruling out the contra-indications). Later few suggestions in conclusion to reduce operative delivery and better feto-maternal out come.

Key words *:* Breech , Cesarean Section.

Any presentation other than vertex presentation is labeled as mal presentation ,breech presentation is one of them . It's incidence is 3-4% in general population. Incidence is more in premature fetuses .It is 15 % at 30 weeks gestation and reduces to just 3-4 %at term because of spontaneous version as the fetus adopts it's contour according to the shape of the uterus .There is high incidence of operative delivery in cases of the breech presentation because of primi-breech, any risk factor like uncontrolled hypertension or diabetes and previous surgery. In addition cause of the breech presentation also leads to the operative delivery. Polyhyderamnios, macrosomia, prematurity, dead fetus, multiple pregnancy and congenital fetal or uterine abnormalities are associated with this mal-presentation., also factors not letting the fetal head to occupy lower uterine segment i.e placenta previa and contracted pelvis.

Prerequisites of per vaginal delivery in breech presentation rule out contraindications and high risk factors contraindications are extended head ,placenta previa and cephalopelvic disproportion while high risk factors are primigravida and grand multipara , fetal assessed weight (below 1.5 kg or above 3.5 kg are adverse factors) ,and gestational age below 32 weeks.

Aims & Objectives

1. Assessing the current incidence of the breech presentation.
2. Detecting the avoidable causes for breech presentation.
3. Determining the rate of operative delivery associated with breech presentation
4. Making efforts to reduce the number of cesarean section in breech presentation.

Material & Method

All the breech presentations presenting in the Lady Willingdon Hospital, Lahore from Jan to Dec. 1999 were included in the study. Then results were tabulated for the cause, gestational age, fetometernal out come, mode of the delivery, degree of antenatal care i.e. whether booked or unbooked. These parameters are then compared with international figures. Incidence of the cesarean section, it's indication and draw backs of the vaginal breech delivery were also focused in the study.

Results

Ten thousand and eighty patients delivered at Lady Willingdon Hospital, Lahore in year 1999.Out of these 939 were by breech presentation , 250 (26.6 %) were booked and 689 (73.4 %) were unbooked .

Mode of delivery was cesarean section in 685(72.9%) and vaginal delivery in 254(27.1%). Only 302 cesarean sections and 148 vaginal deliveries were booked .Among vaginal deliveries spontaneous version occurred in 25(10.1%) patients, external cephalic version was opted in 16(8 successful). So 221 delivered vaginally as breech presentation 32 were delivered as spontaneous breech delivery 140 as assisted breech delivery and 49as breech extraction.

Among those delivered by cesarean section indications were previous cesarean section 114(16.6%), ante partum haemorrhage (placenta previa) 39(5.69%), fetal distress 115(16.8%), cord accidents 39(4.2%), medical disorder (hypertention & diabetes mellitus) 34(4.9%), precious pregnancy 21(3.06 %), macrosomia 19(2.1%), cephalopelvic disproportion 170(24.8%), primibreech 192(28.0%)and multiple pregnancies in 123(13.2%) cases. Cause of the breech presentation was congenital fetal abnormality in 44(4.7%), placenta previa 39(4.2%), prematurity 261(27.8%), medical disorder (polyhyderamnios, diabetes mellitus) 57(6.1%), multiple pregnancies123(13.2%), cephalopelvic disproportion

170(18.2%), intrauterine death 78 (8.4%), macrosomia19 (2.1%) and unidentified cause109(11.1%).

Two eighty three (30.2%) had weight below 2.5 kilogram ,558 (62.3%) were between 2.5 -3.5 kilogram and 71 (7.5%)had above 3.5 kg weight of the fetus. Three twenty five (34.7%) were of 24 – 28 weeks of gestational age, 343(36.5%) of 28 – 32weeks, 149(15.9%) of 32–36 weeks and 122(12.9%) of 36weeks or above gestation .

Out of 939 breech cases 210(22.1%) were primigravida, 497(53.2%) had parity between 2-4 and 232(24.7%) were of parity five or above. Out of total 939 breech cases 9 were stilbirths, 5 early neonatal deaths and one late neonatal death .All pregnancy losses were in unbooked cases delivered vaginally.

Apgar score at five minutes was below 5 in 163(17.45%), between 5-8 in 550(48.62%)and above 8 in 226(23.93%).

Discussion.

Our majority of the patients are unbooked same is the case with the breech presentation .We are facing more complications related to the breech presentation probably because of the unbooked and undiagnosed breech till the onset of the labour. Breech delivery usually goes undiagnosed till labour, 26% patients were first diagnosed in labour[1].

Six hundred and eighty five patients out of 939 under went cesarean section. Among unavoidable indications were previous cesarean section 114(16.6%), precious pregnancy 21(3.06%) ante partum haemorrhage (placenta previa) 39(5.69%), cephalopelvic disproportion 170(24.8%) and multiple pregnancies in 123(13.2%) cases. Avoidable causes were fetal distress 115(16.8%), cord accidents 39(4.2%), medical disorders (hypertention and diabetes mellitus) and macrosomia 19(2.1%) Primi breech was the indication in 192(28.0%) cases, but it's not the absolute indication.

Many women may be encouraged to learn that if they elect to have a cesarean section, over 80 % of those allowed to labour in a second pregnancy will be able to achieve a vaginal delivery[2].

Vaginal delivery is possible after fulfilling the prerequisites of the safe vaginal delivery in experienced hands .Out of 254 vaginal deliveries, spontaneous version occurred in 25(10.1%) patients, this offers us time till 36 completed weeks for delaying the external cephalic version. External cephalic version was opted in 16 it was successful in only 8 cases .32 were delivered as spontaneous breech delivery 140 as assisted breech delivery and 49 as breech extraction.

When ever there is breech presentation cause should be looked for .In our study 11.1% were with un-identified cause while major causes 59.2% were preterm labour, cephalopelvic disproportion and multiple pregnancy commulatively When ever breech presentation is suspected clinically, olyhyderamnois, multiple pregnancy and abnormalities (fetal , uterine, placental and cord) should always be considered[3].

Perinatal mortality rate was 9.7 per 1000 live births per-vaginally delivered and 0.5 per 1000 in the group with planned elective cesarean section[4]There is increased risk of fetal morbidity and mortality in a group with trial of labour 1.23 % than elective cesarean section 0.09%[5]. Although trial of the vaginal breech delivery in selected cases in expert hands is safe so routine cesarean section for breech presentation is not warranted[6,7].Unfortunately the data from the population study conclude that vaginal breech delivery is more hazardous with respect to morbidity and mortality[8,9] except in one study[10].

Majority among breech presentation i.e 71.2% were delivered at gestational age 24-32 weeks 122(12.9%) cases were of gestation 36 weeks or above. So it's incidence is more so in the preterm and premature, in addition it induces preterm labour .

The incidence of the cesarean section is reduced by the external cephalic version[11].
External cephalic version is safe in a review of 979 cases showing no fetal loss although a number of adverse fetal out come[12].

Cesarean section is labeled relatively safe mode of delivery with reference to the fetus , as in our study nine stilbirths, 5 early neonatal deaths and one late neonatal death , all pregnancy losses were in unbooked cases delivered vaginally. Apgar score at five minutes was below 5 in163 (17.45%), between 5-8 in 550(48.62%)and above 8 in 226(23.93%). So 776 had score above five majorities delivered by cesarean section. Breech presentation has a high incidence of the fetal injuries when delivered by the vaginal rout. Incidence of the brachial plexus injury is 8.5% whilst 70% resolve spontaneously so 1-2% of the vaginally delivered breech suffer significant brachial plexus injury[12,13].

Conclusion.

The high rate of operative delivery in breech presentation cases is due to unsupervised ante natal (unbooked cases) , late presentation in the hospital at a time when some additional complication has developed or presenting at a time when version is not admissible .Last but not the least cesarean section because of mismanaged labours by the traditional birth attedants. Early booking, regular visits, early detection of the predisposing factors and managing accordingly. Offering version at 36 weeks gestation or elective cesarean section at 37 completed weeks in patients with recurrent cause or having additional risk factor. Although a major group of the primigravida undergoes cesarean section but vaginal delivery in selected cases by the senior personnel results in good feto-meternal out come with bright chance of vaginal delivery in subsequent pregnancies.

Following options should be discussed with the patient while offering her mode of delivery .In vaginal delivery, options of external cephalic version, percentage of fetal morbidity & mortality, success rate of vaginal trial and need of emergency cesarean section. In addition presence of the personnel, description of the process and epidural analgesia. While in case of the cesarean section maternal haemorrhage and infection are the risks.

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