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Editorial

ANTENATALLY DIAGNIOSED SURGICAL MALFORMATION'S - WHO SHOULD DECIDE

In Bangladesh antinatally diagnosed case of surgical malformation increasing day by day. Almost all the patients who are diagnosed primarily by sonologist referred from obstetrician not before 20 weeks of pregnancy. So the fate of the malformed fetus is also decided by the obstetrician. The commonest anomalies detected antenally are anencephaly, Spina Bifida, Cardiac, renal and Limb anomalies, Hydronephrosis, cleft lip and palate ant abdominal wall defect etc. If the foetus have more than four two anomalies or anomaly is so severe the baby will not survive and the decision is unequivocal. On the other hand if the anomaly is minor like unilateral hydronephrosis, cleft lip and palate, moderate hydrocephalus, club foot without other morbid complication the Paediatric Surgeon is asked for giving decision. In some situation multidisciplinary opinion is sought. But role of paediatric surgeon is becoming more important than others. In most of the cases the obstetrician give the opinion of termination because they don't know that cure is possible in our country in so many difficult case which was not possible before. Most of the termination is done on strong request from the parent as they don't want defective baby. Approximately one fifth are sent to seek opinion of paediatric surgeon.

Out of 55 patient seen in BSMMU for antenatal counseling over last 10 years. 90% patients were after 20 weeks of gestation because of late diagnosis. So only 10% remain for opinion of medical termination. So the antenatal diagnosis should improve a lot and role of paediatric surgeon is decision making must be more.

Diagnostic Methods:

Commonest tool is ultrasound scan which is done specially on there pregnencies where malformation suspected. Hydrocephalus, Hydronephrosis, Cystic hygroma, Abdominal wall defect, Myelomeningocele, Sacrococcygeal teratoma, congenital diaphragmatic hernia it can be diagnosed by ultrasound alone, it is done at 12-14 weeks and 18-20 weeks.

Maternal serum Alpha-fetoprotein (MSAFP) is now being carried out in all suspected mother between 15-17 week of gestation. It is 85% sensitive in case of open neural tube defect and 75% for ant. Abdominal defect. A Low MSAFP indicates Down's Syndrome in 80-90% in women over 36 years and 60-70% women less than 36 years[1]. If the value found is abnormal the triple test comprise of MSAFP, hCG and unconjugated estriol is advisable for further diagnosis, Amniocentesis and Chorionic villous sampling test[2].

Advances in maternal serum screening and 2nd trimester ultrasound have resulted in more judicious use of amniocentesis and chorionic villous sampling[3]. Foetal MRI may provide a more detailed description and insight into fetal anatomy, pathology and anatomy in cerebrospinal, retroperitoneal, neck and thorax that improves prenatal parental counseling and postnatal therapeutic planning[4].

Approach is multimodal:

It is not a problem for one discipline. The obstetrician, radiologist, paediatric Surgeon, neonatologist, neurologist should be involved [5]. A multidisciplinary antenatal diagnosis and management (MADAM) model has been shown to after the perineal management in 75% case[5].

Antenatal paediatric surgical consultation may alter the obstetrician view point to a large extend. In one series the decision to terminate was changed in 3.6%, the site of delivery was changed in 37% to facilitate

post natal evaluation and initial immediate treatment and the mode of delivery was changed in 6.8% to prevent dystocia, haemorrhage into a tumour or to provide an emergency airway as in case of cervical teratoma[6]. The timing of delivery may also be changed in up to 4.5% case to avoid further damage to fetal organ's in case of Obstructive Uropathy, Gastroschisis, Sacrococcygeal teratoma with high output failure and in fetus with hydrocephalus[6].

Its Implication:

The diagnosis of an antenatal surgical malformation allows (1). Antenatal counselling (2). Foetal intervention (3). In utero transfer and planned delivery in a better equipped surgical center. If it is diagnosed before 20 weeks and severe malformed baby, termination is easy. If the anomaly diagnosed after 30 weeks the question of counseling is very important along with ethical consideration. Health care professional can elicit each parent about the fate, prognosis, risk, post operative care. So that parents become sensitized and help in decision making and become positive in coping up with the anomaly[7].

Fallacy of antenatal diagnosis:

All antenatal diagnosis is not correct. False positive have reported from 23.8% to 50% for hydrocephalus and 42.5% in urinary tract anomaly in a study[8]. Errors in the diagnosis resulted from difficulties in the differentiation of dilated ureter, intestinal dilatation or intraperitoneal cystic mass[9]. On the contrary, many surgical anomalies are missed in spite of antenatal USG specially the gastrointestinal atresia, congenital diaphragmatic hernia and abdominal wall defect[8]. With the expertise guided the incidence has come down to about 10% at the tertiary base hospital but situation not improved in peripheral area.

Detection of antenatal dilatation of urinary tract does not always seen in postnatal follow up. Most cases improve spontaneously representing temporary physiological impedance and most of them does not require surgery. In a series 197 newborn ultrasonic follow up shows that 97% resolved. In case of pyelocaliectesia only 3% present in USG and 2% needed surgery [10]. All infant with prenatal diagnosis needs postnatal evaluation.

Our Recommendations:

1. As this is not a single nation problem it should be adressed globally.
2. Obstetrician, Radiologist and Geneticist should be encouraged to referrer the patient with antenatally diagnosed surgical anomalies in time for Paediatric surgeon's opinion and discourage them from making their sole decision for termination.
3. Foetal surgery has very little importance in developing country it has only role on few anomalies.
4. Paediatric surgeon has a very important role to play in the team for antenatal counseling of these anomalies.
5. Create on awareness so that the decision should not be made on a single ultrasonic scan and repeat evaluation in mandatory to filter out some of the false positive results and assure the parents that correctable anomalies can be cured by surgery.
6. Prevention is a must by using folic acid and zinc therapy before and after pregnancy and fortification of food by folic acid for common man.
7. A interdisciplinary committee must be formed in national level so that MDG goal should be achieved in a standard level.

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