



Editorial

Birth defects: a challenge of Neonatal surgery

All developmental anomalies can be called as birth defect and congenital abnormalities which are interchangeable. A birth defect is a broad category of prenatal defect that can be caused by a single gene defect, chromosomal abnormalities micronutrient deficiencies multifunctional inheritance or environmental.¹ It can be presented as isolated or part of a syndrome, considered to be a major causes of neonatal and infantile morbidity and mortality.²

More than 8.14 million children are born with serious birth defect each year caused by genetic or environmental factors in South East Asia the prevalence of birth defects range from 54.1 to 64.3 per 1000 live birth and in Bangladesh it is 58.6 per 1000.³ So Birth defects are emerging as a significant perinatal problem with serious consequences for the mothers and families.⁴ Congenital anomalies account for approximately 7% in al under 5 death Worldwide.⁵ In developing country due to birth defect death account 30-35% where is only 5-7% death in developed country.³

The maximum cause of these defect is still unknown but about 25% of congenital anomalies are thought to be multifactorial implying a complex interaction between genetic and environmental factor.⁶

Many study has been carried out to determine the relationship between risk factors and occurrence of birth defectas for example.

- Folic acid supplementation for neural tube defects correction.⁷
- Thaldomid, phenyton, alcohol, cigarette smoking, certain environment and chemical and high radia-

tion has been found to be related with pregnancy⁸⁻¹⁰.

- Advanced paternal and maternal age.¹¹
- Parental consanguinity
- Increasing birth order
- Low birth weight Most common congenital anomalies have been reported to involve the CNS, CVS and musculoskeletal system.²

In Bangladesh there is no data to reflect the whole countries situation. But study had done in few hospital like BMU where show reports 3.68% on 1630 newborn where neural tube defect.¹⁴ In another studies total defect was 3.7% and CVS were 21%.¹⁵ Among all defect approximately 3% of neonate need surgical intervention at birth or few days after birth^{1,2}. Most infants with otherwise fetal multifunction can be rescued by an operation in the neonatal period however morbidity is high in some of them with the necessity of repeated operation.²

Mortality is still high in newborn with certain malformation such as long diaphragmatic hernia, trachea oesophagus atresia, gastroschisis, ruptured myelomeningocele int. atresia of various cause.

Incidence of surgical congenital anomalies are increasing day by day which is real threat to reduce the neonatal and infant mortality programme. The figure of defect probably not reflecting the actual incidence of congenital anomalies worldwide. Though in western world due to improved maternal and child care and ICU has better chance for survival.

On the other hand this statistical shifts indicate that knowledge about congenital malformation and birth defect is laking behind the progress of clinical research that has been made. So now time has come to take

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efforts are needed to close the gap and learn more about baby killer identification of teratogen.

Conclusion:

Paediatric neonatal surgery is still thriving in our country. Proper antenatal checkup, immunization, proper delivery care and surgical NICU is the demand of the times. To achieve SDG goal and reduce the neonatal mortality comprehensive management of congenital correctable anomaly in most advanced way is needed. All the medical college hospital must have the facilities to deal with such morbid congenital anomalies patient. We are hopeful for better future for congenital surgical patient with improvement of neonatal surgical facilities in Bangladesh.

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