

Pattern of Major Congenital Anomalies in Southwestern Saudi Arabia

Mohammed Abdullah Alshehri, FRCP (Canada)

Background: Currently, in the Arabian Peninsula, genetically determined disorders account for an increasing proportion of death, morbidity, chronic handicap, and disability

Aim: To study the pattern and classification of MCAs in Asir region, during six-year period, in order to allow proper genetic counseling, early management and rehabilitation.

Method: The study included all neonates with congenital anomalies referred to Asir Central Hospital from 1997 to 2002. Cases with genetic syndromes were diagnosed by review of Mendelian inheritance in man and the London dysmorphology database. The major congenital anomalies were classified according to the ICD-10 system, and multiple MCAs were counted only once by the system of the most major anomaly

Results: Of 1171 newborns admitted to neonatal intensive care unit (NICU) at Asir Central Hospital, 691 newborns were proved to have congenital anomalies, constituting 59.1% of all admissions. According to ICD-10 classification of congenital anomalies, the systems involved in the MCAs investigated were (in descending order of frequency) as follows: digestive 28.6%, central nervous 26.1%, circulatory 16.5%, urogenital 7.1%, face and neck 4.1%, respiratory 6.2%, musculoskeletal 3.6%, chromosomal 3.3%, and other anomalies 4.5%.

Conclusion: Congenital anomalies represent the main reason for referral to NICU in Asir region, and this implies that congenital malformations constitute significantly to perinatal and infant morbidity in the region. Premarital counseling should be advised, especially in the presence of parental consanguinity and family history of a congenitally malformed child.