Research Paper

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Incidence and Management of Congenital Anomalies of Otolaryngology and Head & Neck at Tertiary Health Care Center

Medical Science

KEYWORDS : congenital, anomalies, otolaryngology, head & neck, ENT

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ABSTRACT

Indian people are living in the midst of risk factor for congenital anomalies. Incidence of congenital anomalies mostly seen in babies with preterm birth history, history of neonatal intensive care unit admission, family history of congenital anomalies and tribes in which consanguineous marriages are common. Awareness of family about congenital anomalies can help in early diagnosis and management of cases, involvement of primary health care centers and primary health workers by introducing programmes for awareness about congenital anomalies can help in achieving this goal. Health programmes focusing on screening, free surgeries and free devices for congenital anomalies are required. As multisystem involvement is not uncommon in congenital anomalies, so it is necessary to do other special investigation according to primary anomalies to rule out multiple congenital anomalies.

INTRODUCTION-

Indian people are living in the midst of risk factors for congenital anomalies, e.g., high fertility, large number of unplanned pregnancies, poor coverage of antenatal care, poor maternal nutritional status, consanguineous marriages and universality of marriage.

Prenatally diagnosis of congenital anomalies in all cases is not possible because diagnostic tests are not routinely done in all couples, these tests are not available in all hospitals and these tests are expensive.

Many children with congenital anomalies will present to the otolaryngology practice and it is important that surgeon is familiar with characteristic feature associated with the anomalies. All patients with any congenital anomaly are thoroughly investigated to rule out multiple congenital anomalies. It is also necessary to counsel guardians about condition and realistic expectation.

There are many cases reported at late age, it occurs due to poverty, social stigma and lack of awareness in their guardians.

AIMS

- To overview the incidence and presentation of congenital anomalies of otolaryngology and head & neck at tertiary health care center.
- To raise awareness in public about risk factor for congenital anomalies and importance of early consultation for congenital anomalies.
- To study association of congenital anomalies of otolaryngology and head & neck with other system anomalies.

MATERIAL AND METHOD-

The study was conducted at the Civil Hospital Ahmedabad from july 2012 to june 2015. It includes patients presented to otolaryngology and head & neck department, Paediatric department, Plastic surgery department and Paediatric surgery department with complaint of otolaryngology and head & neck congenital anomalies.

Besides all routine investigations, other special investigations depending on the presenting anomaly were done in all patients.

OBSERVATION AND DISCUSSION –

During july 2012 to june 2015, there were 56 cases found of different otolaryngology and head & neck anomalies like ear anomalies (i.e: pinna, external auditory canal, preauricular sinus, middle ear and inner ear anomalies), nose anomalies (i.e: choanal atresia, clefts and external nose anomalies), neck anomalies (i,e: thyroglossus cyst, ectopic thyroid and branchial sinus anomalies), Lip and Palate anomalies (i.e: clefts) and Larynx anomalies (laryngomalacia, laryngeal web and subglottic stenosis).

On investigating further for other then primary anomaly 15 cases found with other system anomalies[1] like heart , kidney, gastrointestinal and musculoskeletal anomalies. And 2 cases found of rare syndromes like "charge syndrome"[2-3] and "maroteux lamy syndrome"[4].

Left anotia with kyphoscoliosis

Photo of case of maroteaux lamy syndrome with characteristic features

Previous study with regard to pattern of congenital anomalies, the most common system involved was musculoskeletal system [5] (33.2%), followed by gastro-intestinal tract (GIT) (15%), craniofacial (11.2%), genitourinary (10.5%), cardiovascular system (9.1%), skin (8.7%) etc.

Birth history and past history showed that 2 babies have Foetal alcohol exposure, 3 had family history of congenital anomalies, 6 babies were born of consanguineous marriage, 8 cases had preterm delivery and 12 cases had neonatal intensive care unit admission. Their history indicates risk factors for congenital anomalies, so any birth with these risk factors requires observation and examination for congenital anomalies.

Previous studies show that consanguineous marriages[6] are reported to play a major role in the occurrence of congenital malformations. The incidence of congenital anomalies was significantly higher in preterm babies[7] as compared with the full term babies. Association of low birth weight[8] with increased risk of congenital malformations is very well- documented. These shows that awareness about maternal care during pregnancy, educational programs on congenital malformations and the consequences of consanguineous marriages need to be highlighted to decrease the incidence of congenital anomalies.

Age of cases presented for major anomalies varies between just born babies to 16 years. These results clearly indicate that parents are not taking their child early to hospitals, reason may be poverty, social stigma or lack of awareness. And it shows requirement of strong awareness measures for congenital anomalies.

Case in minor congenital anomaly without any complication (i.e: preauricular sinus) even presented at age of 36 and was found no any other system anomaly.

50 patients were managed surgically for primary anomaly and patients with associated congenital anomalies were refereed to respective specialist department and managed by team approach of different department.

Only 2 patients with microtia/anotia were managed by bone conduction hearing aid. Other 4 patient of microtia/anotia are still not using any hearing aid because they requires special type bone conduction hearing aid which is expensive and unlike simple hearing aid, it is not available free at government institutes. If these expensive devices are available free for these children, their quality of life is improved and their social and educational development was not compromised.

These are the only cases which presented at tertiary health care center. There are many more cases who have still not visited any hospital for anomalies.

CONCLUSION-

Screening for congenital anomalies should be done of neonates, who take birth with risk factors for congenital anomalies.

Detail investigations should be done of patients for primary anomaly and rule out other system anomaly.

Public awareness for congenital anomalies especially at rural level must be achieved by involvement of primary health care centers and health workers.

Government should start more health programmes focusing on public awareness about risk factor of congenital anomalies, health programmes which make available free investigation, surgeries and devices to these congenitally malformed children.

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