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Pathogenesis of Some Congenital and Acquired Defects in Oro - Facial Areas and Their Social - Medical Role in Children Left in a Social Institutions in Bulgaria

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Abstract: ***The development of the human organism is a continuous process starting from fertilization and passing through various transformation stages: the cell division, migration, differentiation, growth, cell-tissue arrangement and programmed cell death. This process can be divided into two periods: prenatal (before birth) and postnatal (after birth). Often ,when pregnancy is unwanted, women attempt with different medications and physical remedies to abort the fetus. Consequently, occurs plenty of different types of anomalies, a product of errors in morphogenesis. We will examine some of the defects in maxillo - facial area, the most common in children left for growing in social institutions.***

Keywords: Defects in maxillo - facial area, Anomalies, Unwanted pregnancy, Children

1. Introduction

The development of the human organism is a continuous process starting from impregnation and passing through various stages of transformation, cell division, migration, differentiation, growth, cell-tissue arrangement and programmed cell death. This process can be divided into two periods: prenatal (before birth) and postnatal (after birth) [1, 2].

Interest in the development of maxillo - facial area of the human from the moment of the conception to birth is driven primarily by scientific and clinical aspects with the main goal - the desire to improve the quality of life and uncover the secrets of the human body. We chose the facial area as it relates to the appearance of the individual and occupies an important place in his personal and social life [2, 3, 4]. All congenital anomalies are in severe trauma to the patient and require treatment to eliminate the aesthetic and functional defect and ensure optimal social adaptation of personality.

- Kavrakirov and Atanasov divide congenital defects maxillo - facial area from didactic point of view as follows:
- deformations of the jaw bones - sagittal deformities (maxillary and mandibular makrognatiya or micrognathia), vertical deformation (front or lateral open bite and deep bite), transverse deviations (laterognatiya) and combined deformities;
- facial clefts - they use the anatomical classification of Paul Tessier introduced in 1976 .;
- lateral cleft lip - they are divided into partial (2/3 of the length of the mouth) and total (covering the entire lip), in addition to passing and too large to pass on the alveolar ridge and palate;
- slit-like defects of the palate;
- defects of the nose;
- defects in the cochlea.

The purpose of this study is to present some of the anomalies occurring in disadvantaged children (abandoned in nursing homes).

2. Materials and Methods

The clinical examination took place in nursing homes on 48 children. Following the thorough clinical examination of the children We found several defects in the maxillofacial region and those were presented in section results.

3. Results and Discussion

From the survey revealed the presence of 16 children with defects and anomalies in the maxillofacial area. Of these, two are with Goldenhar - Gorlin syndrome,

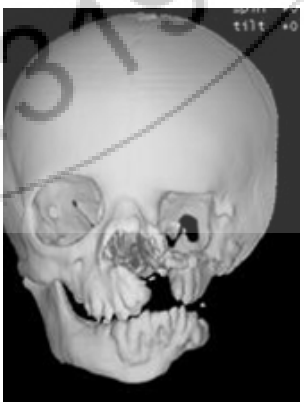

Figure 1: Computed tomography of the skull of a child with Goldenhar syndrome - Gorlin

The etiology of the syndrome is not fully understood [1, 2]. Most likely, it is a vascular event during intrauterine development. The lesions are directly dependent on, as well as the period of intrauterine development and on the degree of tissue involvement. It is believed that the characteristic of the asymmetric malformations of the face, eyes and ears were first described in the nineteenth century. German physician Carl Ferdinand von Arlt, but it was to be many years until in 1952 the French ophthalmologist Maurice Goldenhar overhaul problem and pulled forward the three main clinical signs of this syndrome:

(1) Epibulbar dermoids of the eye;
(2) Preauricular skin folds;
(3) vertebral anomalies.

In fact, it is difficult to be given a precise definition of this syndrome. Abnormalities of the spine, eye and ear differ in it"s severity, and in addition in some patients may be observed malformations of the heart, other internal organs, as well as the rest of the musculoskeletal system. This gives rise to many controversial discussions: Whether it is a single disease with a broad phenotype, or several different diseases?

For example, unilateral hypoplasia of the mandible, accompanied by malformation of the ear on the same side some call hemifacial microsomia When, in addition are discovered anomalies of the eye, spine, heart and ulna was diagnosed: Goldenhar syndrome. While in most classifications these two states appear separate from each other, is universal recognition that are found patients with a diverse mix of features. It is also an abundance of transitional forms, which reinforces the belief that both of these conditions stem from similar errors in morphogenesis. The exact incidence of Goldenhar syndrome is not known, but it is certainly not rare - estimates range from 1 in 3,000 to 1 in 5,000 live births [2].

Children with this disease can be found in every major scoliosis clinic and home for abandoned children. In 85% of cases malformations of the face, eyes and ears are unilateral, but even in patients with bilateral abnormalities severity is distinctly asymmetric. As a rule, there is a rudimentary dentition and the construction of an attractive face of the child is indispensable cooperation of orthodontic, maxillofacial and plastic surgeons and prosthetists. The configuration of the face somewhat reminiscent of Trencher Collins mandibulofacial facial dizostoza.

This autosomal dominant syndrome, however, affects symmetrically both sides of the face and does not meet any ocular dermoids or vertebral anomalies. The test revealed the presence of four children with slits. In two of them had only soft tissue damage, and in 2 children with the defect affects the palate.

There are also functional disorders – disturbed are eating and talking of the patients [3, 4, 5]. Associated with disorders Hermeticism, so the child can not distinguish respiration from swallowing food aspirates food, chokes and vomits. Therefore, it is necessary children to eat in a reclining position, but if impossible - with a bottle with pacifier filling the defect of the palate. Disturbances of speech feature dislaliya rhinolaliya and that requires appropriate logopedic. training

4. Conclusion

1) Planning for pregnancy.
2) Prevention of unwanted pregnancy.
3) During pregnancy to avoid the use of teratogenic medications.
4) Training students to explain the harm of abortion attempts.
5) It is necessary systematic study of patients in risk groups for early detection of malformations.

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