

Unilateral Orofacial Clefts: Prenatal Diagnostic by Ultrasonography

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Abstract PURPOSE: To report a case of unilateral cleft with antenatal diagnosis in routine ultrasound. **CASE DESCRIPTION:** Patient aged 21 years, in the first pregnancy, referred to the Fetal Medicine Unit of the University Hospital of Santa Maria due to the ultrasound diagnosis of discontinuity lip and palate, compatible with cleft lip and cleft palate. Prenatal uneventful and patient developed for cesarean delivery by cephalopelvic disproportion with female newborn, 3270 g, Apgar 10-10, confirming the diagnosis. **CONCLUSIONS:** unilateral orofacial clefts are common in female newborns, with deficiencies of folic acid like some risk factor and surgical treatment does not occur in the immediate postpartum period to be unfavorable an esthetic and functional point. The family counseling from pre-natal to ensure such understanding and the cleft lip and palate can be corrected completely, achieving better quality of life and the report of this case is important to exemplified the importance of a monitoring by a multidisciplinary team.

Keywords: Orofacial clefts, Ultrasonography, Prenatal, Counseling

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1. Introduction

Cleft lip is the most common defect in bone mass at birth with a focus on low-risk population of 0.2%, with or without cleft palate with prognosis modified in the presence of other malformations [1]. The presence of associated anomalies can vary from 10 to 83% according to various authors [1,2].

The occurrence of this anatomical defect stems from primary defects in the first trimester, the merger of the craniofacial processes that form the primary and secondary palate, with genetic and environmental influence in this process [3].

The slit Classification is determined by its location (unilateral, bilateral or midline), its length (lip, palate or both) and side (left or right) [2,4]. And obstetric ultrasonography allows prenatal diagnosis of lip and / or cleft palate and became mandatory item in the fetal morphological evaluation, which implies familiar advice, however this method has detection rate between 27 to 30% [2].

The importance of description and assessment of this case is an attempt to improve the understanding of its pathogenesis due to psychological and social consequences it causes, even when not associated with other malformation worst prognostic [5,6,7].

The publication of the case was approved by the Ethics Committee of the Federal University of Santa Maria based on Resolution 466/2012 of the National Board of Health and by the application of consent by the pregnant woman.

2. Case Report

JSC patient, 21 years old, primiparous, married, with maternal diagnosis of pulmonary hypertension defective heart valves corrected in childhood, without medication, referred to the Fetal Medicine Service of the University Hospital of Santa Maria (HUSM) at 36 weeks and 4 days of gestational age due to the ultrasound diagnosis of discontinuity lip and palate, compatible with cleft lip and cleft palate, confirmed on ultrasound performed in our service (Figure 1).

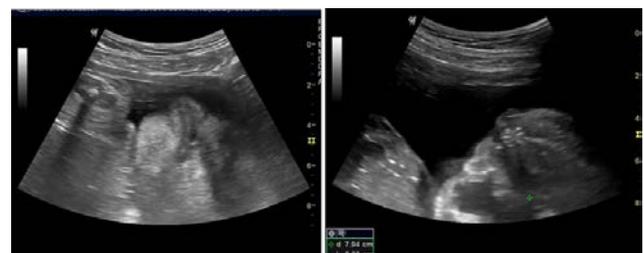


Figure 1. Discontinuity of the upper lip and palate

Patient evaluated by a cardiologist without case of fetal malformation medication discussed with HUSM of Pediatric Surgery, indicating surgery after 12 months of life according to the child's parameters.

Prenatal uneventful and patient developed for cesarean delivery by cephalopelvic disproportion with female newborn, weight 3270 g, Apgar score 10/10, confirming the diagnosis of cleft lip and palate (Figure 2). Postpartum women received care guidelines with newborn and regular return on childcare clinic, no other abnormality was identified.



Figure 2. appearance in the immediate postpartum.

3. Discussion

With the growing world population, an additional 3200 new annual cases of this type of cleft are expected three and Brazil the frequency of cleft lip and palate is 37.1%, occurring in one in every 650 births. [7] Cleft lip is more common in male fetuses and cleft in females, that the fact that the palate merges later in embryonic life in female fetuses [1,5,7,8,9,10] as found in the case reported. However, unusual types of cleft lip and palate are more prevalent in boys [4].

Some risk factors identified in some studies were alcohol; maternal age; consanguinity; family history of orofacial clefts; medicines - such as the use of anticonvulsant drugs during the first trimester of pregnancy; and deficiencies of folic acid [3,4,8,10]. Several studies have been conducted on smoking and congenital malformations and showed smoking as a risk factor for oral clefts, noting the modifiable extrinsic factor that is involved in this pathology and is dose-dependent [9].

In this case, the only risk factor present in the case was not to supplementation of folic acid, a factor also found in a study conducted in Brazil although conflicting with some literature data [10].

The literature consider the fetal karyotype when associated malformations and / or when the facial cleft is diagnosed median or bilateral, but some authors believe is premature to abandon the idea of not offer this method to all parents with fetuses with this diagnosis independent of type 1, with the help of order in counseling and postnatal

planning [2]. For the pregnant woman in question was not offered this procedure due to advanced gestational age was referred plowing the Fetal Medicine service. In postnatal study, performed karyotype was normal.

This pregnancy to identify the ultrasound did not bring difficulties for the diagnosis, however, it is noteworthy that the 2D ultrasound remains low detection rates of these findings, probably due to face not be evaluated in low-risk pregnancies and the need for proper training in the evaluation of cracks - the difficulty of achieving evaluate the coronal and axial planes at the level of the jaw [2]. The 3D ultrasound appears as a promising method to evaluate more adequately the tooth germs and the alveolar arch of the maxilla [2] study that was not possible in this case due to fetal static.

A classification widely used in Brazilian studies is to Spina, which uses the incisive foramen as anatomical reference, subdivided into: pre, during and post-foramen, and the transformed the most prevalent [8] and the type usually unilateral be more frequent than bilateral, predominantly on the left side [5,10]. In this report, the classification was the unilateral transforaminal and left, confirming the most prevalent findings in the literature.

Surgical treatment does not occur in the immediate postpartum period to be unfavorable an esthetic and functional point, which shows the importance the family counseling from pre-natal to ensure such understanding and the cleft lip and palate can be corrected completely, achieving better quality of life [7,8]. Therefore, monitoring by a multidisciplinary team becomes imperative to better understand the family and this was the reason for reporting this case.

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