

Dorota Cudziło

MICROFORM CLEFT LIP OR CONGENITAL HEALED CLEFT LIP?

NIEPEŁNA FORMA CZY SAMOWYLECZENIE ROZSZCZEPU WARGI?

Orthodontic Clinic for Children
Institute of Mother and Child, Warsaw, Poland

Abstract

This paper presents the case of a patient with a visible scar indicating the occurrence of a cleft lip in the past. Anamnestic examination ruled out any facial surgery having been performed on the child and the parents confirmed the existence of the scar from birth. Intraoral examination revealed hypodontia of a lateral incisor on the side opposite the scar as well as hyperdontia of lateral incisors on the same side as the scar. This seems to confirm the existence of a cleft in the primary palate during gestation. A microform cleft primary palate is extremely rare and there are only isolated reports in the international literature relating to the spontaneous healing of such defects in utero.

Key words: cleft lip, congenital microform cleft lip, hyperdontia, hypodontia

Streszczenie

W pracy zaprezentowano przypadek pacjentki z widoczną blizną wskazującą na istnienie w przeszłości rozszczepu wargi. Badanie anamnestyczne wykluczyło jakikolwiek zabieg chirurgiczny w obrębie twarzy, natomiast rodzice potwierdzili istnienie blizny od momentu urodzenia. U dziecka w badaniu wewnątrzustnym stwierdzono hipodoncję zęba siecznego bocznego po stronie przeciwnej do blizny oraz hiperdancję w obrębie bocznych zębów siecznych po stronie blizny. Potwierdzałoby to istnienie w życiu płodowym wady rozszczepowej w obrębie podniebienia pierwotnego. Niepełna forma rozszczepu podniebienia pierwotnego jest bardzo rzadko spotykana i w piśmiennictwie światowym znajduje się pojedyncze doniesienia o ich samowyleczeniu w życiu płodowym.

Słowa kluczowe: hiperdancja, hipodancja, rozszczep wargi, wrodzona blizna wargi

DEV. PERIOD MED., 2014, XVIII, 1, 23-26

INTRODUCTION

Patients with a unilateral cleft lip and palate are frequently affected by hypodontia (missing teeth) or hyperdontia (supernumerary teeth); also the structure of the teeth may be altered. This usually pertains to the teeth adjacent to the fissure (1, 2).

The aim of this paper is to present the case of a patient where the existence of a cleft on the left side and its spontaneous healing in intrauterine life was suspected, with the resultant scar accompanied by both hypodontia and hyperdontia.

CASE REPORT

A patient, aged 11, who reported to the Orthodontic Clinic at the Warsaw Institute of Mother and Child because of dental disorders displaying features characteristic of patients with a unilateral, left-side cleft lip which had been corrected by surgery. On the left side of the upper lip a fine vertical scar was visible, with a slight shortening of the upper lip in this area. This was accompanied by an asymmetry in the nasal base on the left side (Fig. 1). Anamnestic examination ruled out any surgical intervention involving the face. Intraoral examination revealed correct

dental relationships in the lateral sections: Angle's Class I in first molars, slightly increased overbite and normal overjet. The maxillary midline was slightly shifted to the right because of the absence of a lateral incisor on the right (hypodontia of tooth 12), and a supernumerary lateral incisor on the left (hyperdontia: teeth 22 and 22) (Fig. 2). One of the lateral incisors on the left was slightly rotated in the alveolar process, which could indicate a disruption of continuity in the jaw. A facial analysis and an evaluation of the dental and occlusal conditions indicated features consistent with a cleft primary palate. This was confirmed by means of a radiographic examination in a panoramic x-ray (Fig. 3). Supernumerary tooth 22 was observed, which indicates a developmental disorder of the dental lamina.

An interview with the mother of the child revealed that birth took place in the 38th week of pregnancy and followed a normal course. At birth, the baby weighed

3150 g, measured 56cm, and received an Apgar score of 10. In the first trimester of pregnancy the mother suffered from a cold but did not take any medication. The child was not diagnosed with a cleft lip at birth and no corrective surgery was performed in the facial area either immediately after birth or later. The postnatal scar above the upper lip and the asymmetry of the nostrils were visible from birth. The mother documented this with numerous photographs of the child's face (Fig. 4).

Radiographic examinations (panoramic and cephalometric x-rays) conducted as part of a standard procedure in the Orthodontic Clinic did not unequivocally reveal the existence of a cleft in the bone structure. The asymmetry in the upper arch close to the nasal base visible in the panoramic x-ray was consistent with the features characteristic of a patient with a unilateral complete cleft of the primary and secondary palate (Fig. 4).



Fig. 1. Patient laterals and front photo with subnasal area.

Ryc. 1. Wygląd twarzy pacjentki profil lewy, en face, profil prawy, okolica podnosowa.

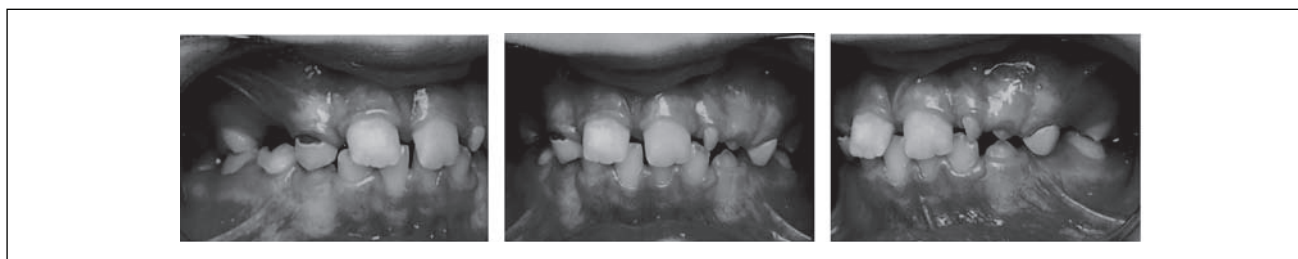


Fig. 2. Intraoral occlusal view.

Ryc. 2. Warunki zgryzowe wewnętrzne.

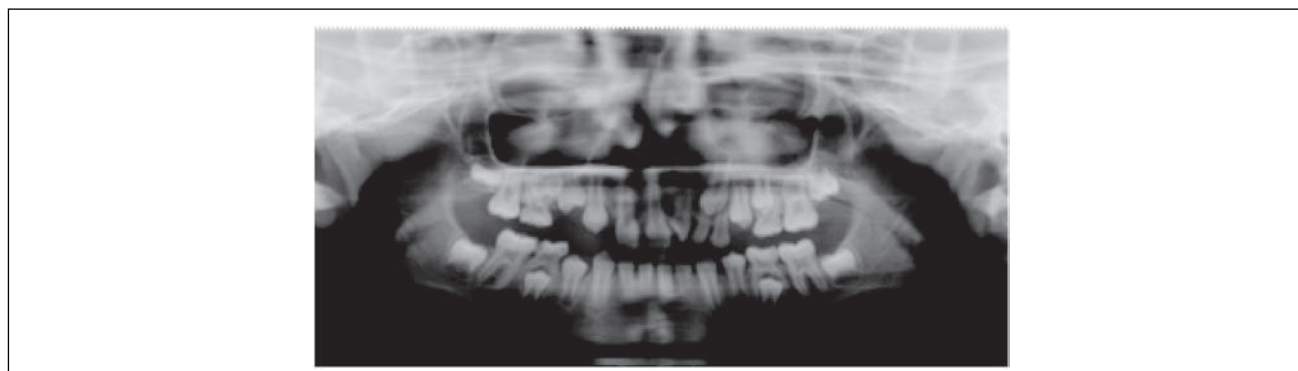


Fig. 3. Orthopantomogram – hypodontia of 12 with supernumerary 22.

Ryc. 3. Pantomogram - hipodoncja 12 wraz hiperdonicją 22.



Fig. 4. Patient photo just after birth, at 2 year, at 5 years.

Ryc. 4. Pacjentka tuż po urodzeniu, w wieku 2 lat, 5 lat.

DISCUSSION

In patients with a cleft primary and secondary palate the most characteristic dental feature is hypodontia, which is confirmed by a number of authors (1, 2, 3). However, there are also reports of cases of hyperdontia. Supernumerary teeth usually appear near the fissure within the alveolar process (3, 4). In the case of the patient described in this study, intraoral examination revealed abnormalities in the number of incisors on both sides of the maxilla.

The facial features visible in an extraoral examination were typical of a patient with a cleft. The appearance of the subnasal area resembled that of patients who had undergone primary corrective surgery of the lip. In this case, however, the child had not been operated on and the scar was already noticeable at birth. In the literature there are only isolated reports describing the occurrence of similar cases (5, 6). Such an image of the face is referred to as a microform cleft lip or a congenital healed cleft lip (5, 6, 7). Such a diagnosis can be made not only on the basis of an interview but also the shape of the scar. After corrective surgery for a cleft lip the scar usually has a zigzag shape, depending on the incision lines and the adopted method of surgical correction (8). In the case discussed here, the scar was vertical and ran in a straight line.

Hunnekens et al. reported the case of a baby in whom a microform cleft was suspected. An interview revealed that the mother had a history of cleft lip and palate. Examination of the foetus in the 21st week of gestation did not show the presence of a cleft, and after birth a fine vertical line was observed extending along the upper lip. Further examination revealed an intact palate and symmetrical nostrils, gums as well as jaw. No other abnormalities were found in the child described by Hunnekens (9).

In the case of the patient described in this paper, heteroanamnesis revealed that no cleft defects had occurred in the closest family.

An occlusal analysis of the patient indicated a rightward shift in the midline of the upper arch. A similar phenomenon can be observed in patients with a complete unilateral

cleft lip and palate, where the nonclefted side is often shifted in the opposite direction from the cleft (8).

When the patient was first seen by an orthodontist, she had not reached the stage of puberty. During this period of development treatment planning can follow several routes. One can consider creating a space for tooth 12 followed by inserting an implant or another prosthetic solution at a later stage. There is also the possibility of an autotransplantation of supernumerary tooth 22 in place of missing tooth 12. A necessary precondition for the success of this procedure, however, is the incomplete development of the root apex of the transplanted tooth. After being acquainted with the proposed course of action, the parents adopted a noncommittal attitude. If no consent is given to autotransplantation in the near future, supernumerary tooth 22 ought to be extracted and an orthodontic treatment plan ought to be adjusted to the occlusal conditions which will arise in the future.

CONCLUSIONS

A post-natal scar indicating a cleft lip is extremely rare, hence the diagnostic techniques adopted so far for the evaluation of cleft lip and palate may turn out to be insufficient to permit a detailed description of all the orofacial structures.

REFERENCES

1. Tortora C., Meazzini M.C., Garattini G., Brusati R.: Prevalence of abnormalities in dental structure, position, and eruption pattern in a population of unilateral and bilateral cleft lip and palate patients. *Cleft Palate Craniofac J.* 2008, 45, 154-162.
2. Akcam M.O., Evirgen S., Uslu O., Memikoğlu U.T.: Dental anomalies in individuals with cleft lip and/or palate. *Eur. J Orthod.* 2010, 32, 207-213.
3. Wong H.M., Lai M.C., King N.M.: Dental anomalies in Chinese children with cleft lip and palate. *Dentistry* 2012, 2, 1-8.
4. Aizenbud D., Coval M., Hazan-Molina H., Harari D.: Isolated soft tissue cleft lip: epidemiology and associated dental anomalies. *Oral Dis.* 2011, 17, 221-231.

5. *Pomerance H.H.*: Congenital prolabial-maxillary scar: a possible minor expression of cleft lip. *J. Pediatr.* 1971, 78, 868-870.
6. *Grech V., Lia A., Mifsud A.*: Congenital heart disease in a patient with microform cleft lip. *Cleft Palate Craniofac J.* 2000, 37, 596-597.
7. *Castilla E.E., Martínez-Frías M.L.*: Congenital healed cleft lip. *Am. J. Med. Genet.* 1995, 28, 58, 106-112.
8. *Dudkiewicz Z., Piwowar W., Surowiec Z., Fudalej P., Obłój B., Cudziło D., Hortis-Dziezbicka M., Radkowska E., Stankiewicz J., Nowicka G.*: (30-year experience in one stage treatment of unilateral cleft lip and palate – multidisciplinary assessment of late results - new strategy of treatment). *Standardy Medyczne – Problemy Chirurgii Dziecięcej.* 2011, 1, 1-10. (Article in Polish).
9. *Hunnekens M.C., Rook F.*: (A newborn with an unusual lip). *Ned Tijdschr Geneesk.* 2010, 154, 45, A1304. (Article in Dutch).

Conflicts of interest/Konflikt interesu

The Author declares no conflict of interest.
Autorka pracy nie zgłasza konfliktu interesów.

Received/Nadesłano: 27.09.2013 r.

Accepted/Zaaceptowano: 03.12.2013 r.

Published online/Dostępne online

Adres do korespondencji:
Dorota Cudziło
Poradnia Ortodontyczna dla Dzieci
ul. M. Kasprzaka 17a, 01-211 Warszawa
tel. praca (22) 32-77-128
tel. dom (22) 898-14-91
e-mail: dcudzilo@gmail.com