THE NASAL CORRECTION IN THE PATIENTS WITH UNILATERAL COMPLETE CLEFT LIP AND PALATE

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Introduction. Cleft lip and palate is the most common congenital pathology in the maxillofacial region. In Latvia congenital cleft incidence is 1.4 per 1000 live birth. The nasal deformity always accompanies the unilateral complete cleft lip and palate (UCLP). The correction of the nasal deformity in patients with UCLP is actual problem. There is no single option for the correction of nasal deformity and the results are not always excellent.

Aim of the study. To analyse literature about primary and secondary nasal corrections in patients with UCLP.

Materials and methods. A review of the literature has been conducted using MedLine and PubMed sources dated 1991-2008.

Results. The key components of nasal deformation are the caudally and downward positioned lower lateral cartilage in the cleft side, nostril arch asymmetry, flattening of the ala nasi, shorter columella on the cleft side, hypoplastic nasal bone platform of the cleft side. The nasal deformation at UCLP affects also nasal septum. The primary correction of nasal deformation is performed simultaneously with cleft lip repair. For permanent stability and shape of the septum, the mucosa must be completely dissected from the septum and subperichondrally on both sides. The tasks of secondary nasal correction depend on primary operations, but most frequently are the skeletal frame, the internal deformations and the lower lateral cartilage reorganization. The adjustment is recommended to be made before the child starts going to school. The most of authors recommend open rhinoplasty approach as the best at the secondary nasal deformity correction. The rhinomanometry is the technique most frequently used to estimate functional nasal potency in a quantitative manner. The functional nasal principles of valuation are more objective than esthetical. The aesthetic measurements are used by direct and indirect contact methods of measuring linear distances and angles between different anatomic landmarks. The aesthetic evaluation methods are very many; this suggests that there is no single ideal, since they are rather subjective.

Conclusions. The first nose correction is recommended together with primary lip plastic. Closed rhinoplasty approach, the nasal alar cartilage and septum correction in the primary nasal correction is recommended. The secondary nasal correction tasks are to provide nasal breathing and aesthetics with the open approach rhinoplasty. There are a small number of studies, which would have taken the nasal function and aesthetics measurements together.

DIALYSIS IN COMPLEX TREATMENT OF PURULENT MAXILLOFACIAL WOUND

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Dialysis is a "method of low-molecular substances removal from the solution of colloid and high-molecular substances, based on semipermeable membranes' capacity to let through ions and low-molecular substances and to detain colloid particles and macromolecules". Dialysis is a kind of "molecular sieve", usable for molecules sorting in terms of their size, by application of various semipermeable membranes.

In the period of years 2007 and 2008, in Clinic of Maxillo-facial Surgery of Vinnytsia Regional Hospital (Vinnytsia, Ukraine) we performed treatment of 62 patients with abscesses and odontogenic phlegmones of maxillo-facial area. Thirty patients were treated with standard methods but 32 patients received wound dialysis.

For wound dialysis we used cylindric cellulose semipermeable corrugated food membrane, manufactured by Byelorussian Enterprise "Belprominvest". This membrane has possibility easily create a necessary shape, convenient pore diameter, mechanical resistance, etc. Said cellulose membrane belongs to anisotropic semipermeable membranes with pore diameter varying from 1.5 to 2.5nm.

Treatment was performed according to the following procedure: Semipermeable membrane was given a shape of special container – dialyzer, subsequently filled in with dialytic solution, tied up with polyamide suture. Dialyzer was introduced into a wound as drainage for 24 hours. The wound was dressed aseptically. Dialytic solution contained Polysorb, Decasan and Anafrin.

Replacement of dialyzer and/or dialytic solution was performed daily, while applying dressings. To replace medicinal substance, catheter with plug was tied up to the container, with polyamide suture thread. Catheter was delivered to the dressing. Replacement of solution was performed through catheter using syringe.

This method provided regular inflow of medical substances to the wound. Control for purulent wound healing was performed through screening of clinical parameters of wound process, and by cytological and microbiological methods.

Therapy techniques involving application of semipermeable membrane with dialytic solution, used for complex treatment of odontogenic infections in maxillo-facial area are efficient and promising for rehabilitation of patients. These techniques provide:

a) dehydration of tissues;
b) detoxication of body;
c) dosed delivery of medical substances.

Application of wound dialysis technique at wound process with prevailing exudation phenomena permits to apply secondary sutures on 3rd or 4th day, which is an important index of therapy efficiency.

ADVANTAGES OF USE OF PERIPHERAL NERVES STIMULATOR STIMUPLEX DIG RC FROM B.BRAUN COMPANY FOR BLOCKADES OF N.MANDIBULARIS AT FORAMEN OVALE

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Subzygomatic channel of central anesthesia for blockades of mandibular nerve is not commonly used during maxillofacial surgeries. Several methods of n. mandibularis block anesthesia at foramen ovale have been offered and used so far (J. Braun, 1909; A. Ceszynski, 1910; Berscher, 1922, V. M. Uvarov, 1929; S. N. Weissblat, 1956; P. M. Egorov, 1967). Their performance is too complicated technically and not always efficient.

The most challenging in performance of such blockade is localization of puncture point and retrieval of the main trunk of n. mandibularis at foramen ovale (S. N. Weissblat, 1956; P. M. Egorov, 1967).

Another concern is the size of the needles currently used for injections by out-patient dental clinics: most needles are too short to efficiently perform such blockades.

The longest needle available on the market and compatible with carpal syringe is 27G*41mm (by NIPRO), while the length of the needle of 5ml disposable syringe is 40mm, - too short to reach the foramen ovale and resulting in failures.

Such factors as the absence of the precise procedure for localization of puncture point, and unavailability of the needles of sufficient size significantly reduce the number of successfully completed anesthesia manipulations.

Taking into account above said we believe that performing localization of mandibular nerve through use of ***peripheral nerves stimulator Stimuplex DIG RC from B.Braun Company*** will be a convenient and appropriate method. Administration of anesthetic drug may