Treatment of Patients with Cleft in CSSR

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In view of an increased number of congenital anomalies, it has become necessary to establish new centers for treatment and research in Czechoslovakia. Established treatment centers are in a position to offer assistance and advice to new clinics being established. In a multidisciplinary clinic, organization and cooperation of a cleft specialists' team are imperative and are looked upon with the same interest as discussing various surgical methods. In Czechoslovakia, the regulations imposed by the Health Service on all clinics and departments of plastic surgery stimulates a cooperative team effort in the management of children with facial clefts. The Plastic Surgery Clinic of Brno in the region of South Moravia has a well-developed organization for the care of children with facial clefts. The organization of this Clinic will be described in the following paragraphs.

General Program of Treatment

The group is composed of seven surgeons, an anesthetist, a pediatrician, and an orthodontist, as well as para-medical workers, such as a rehabilitation counselor. The Clinic pediatrician takes care of the child's medical needs during his admission for surgery, and writes a detailed report including any information that might be of research interest. When the patient is discharged, the pediatrician instructs the parents or guardians and cooperates with the practicing pediatrician, school doctor, or the doctor for teenagers. The surgical procedures are performed under either local or general anesthesia, depending upon the age of the patient and the magnitude of the operation. The anesthesia is administered by a qualified anesthetist.

The Orthodontic Department is a branch of the Stomatology Clinic, and there is, in addition to the qualified orthodontist, a trained nurse and a laboratory technician. The orthodontic laboratory supplies plaster models, splints, and other orthodontic aids helpful in the stomatochirurgical work. The close relationship between the Orthodontic Department and the Plastic Surgery Clinic came about through the need for orthodontic assistance in the management of facial clefts. The orthodontist cooperates with the surgeon in the operating theater so that he might have first-hand information on the surgical management of clefts of the lip and palate; he himself performs operations, too.

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The management of patients with cleft lip and palate in the department can be divided into four categories; 1. Prevention, 2. Treatment, 3. Research, 4. Coordination of the Rehabilitation Services. In fulfilling the first task, referred to as Prevention, the cooperation of the family is necessary. The parents are informed of their responsibilities, the sequence of events in the rehabilitation program with the time limits, and the danger of neglect. To emphasize this further, the family is supplied with a booklet on the care of children with a cleft.

During the periodic visits to the Clinic, the growth and development of the face and the development of the speech pattern are carefully noted. The patient is introduced to orthodontic, logopedic, surgery, psychiatric, or other treatment as the occasion arises. The orthodontic service continues throughout the entire period of growth and development of the patient, especially with complete clefts. The greatest effort in orthodontics is between eight and twelve years of age, when an attempt is made to correct any defect in the dental arch.

The complete bilateral clefts in the region of South Moravia are referred to the nursery clinic of Brno. Initially they are under the care of the pediatrician and during this time pre-surgical, maxillary orthopedics is carried out by the orthodontist. When ready for surgery, the patient is transferred to the Plastic Surgery Clinic and the orthodontist follows the case through this service. When a patient is discharged from the Clinic at Brno, a report is sent to the District Stomatologist. The child visits the stomatology center near his home four times a year. He has the service of the district pediatrician and orthodontist and, during his visit, adjustments are made to his orthodontic appliances so that it is not necessary for him to travel a great distance to the clinic at Brno. Research information, such as the development of the jaws and dentition, the development of speech, and a description of orthodontic treatment, is collected by the Department of Documentation. Even though the management of complicated problems requires a multidisciplinary effort, the direction and coordination of the program is placed in the authority of one doctor. It is the duty of the director to see that the sequences in the rehabilitation program are pursued in a smooth and logical manner. Because orthodontia is related to the function of the oro-facial system, and because of the necessity for a long-time survey of the patients, the responsibility for guiding the rehabilitation program is placed in the Orthodontic Department.

There is often need for corrective surgery in these patients, such as releasing a tight upper lip, reconstruction of a vestibule, osteotomy of the jaws, etc. The work of the surgeon is often more glamorous and appreciated because of the rapid change he produces. There are, however, many other medical workers and collaborators who devote many hours to these patients and who are essential to the satisfactory completion of the case.

One of the closest collaborators in the program is the speech therapist. He makes regular examinations of the speech and hearing on the day of the Clinic visit. The therapist makes a record of his findings and submits recommendations for the treatment of faulty articulation and recommends physical treatment to improve speech quality. The mother is usually present and is instructed in home training. The University-level speech therapist organizes courses for the regional therapists. If the patient has not progressed satisfactorily in his regional classes, it is recommended that he enter a weekly nursery school for children with faulty articulation, or a boarding school for speech defects. In the boarding school, the patient with a cleft can obtain concentrated speech therapy and continue with his usual school program. The entire staff of the school is oriented in speech re-education and the patient is not permitted to use faulty speech habits outside of the classroom. In South Moravia, there are two boarding school institutes for speech defects of all types. Each has about 70 beds, but this is inadequate because of the great number of speech defects that exist. The members of the plastic surgery clinic would be happy if the Institute of Brno could devote full time to the rehabilitation of children with a cleft.

The child often receives speech therapy relatively late, often after admittance to school, even though there are relatively many speech therapists throughout the land. The teacher frequently waits for school age, thinking that the children will be more disciplined and capable of learning. Such a delay, however, is often associated with fixed faulty speech habits. The psychiatrist has become interested in working with the clinic group and caring for children with a cleft because of the frequent appearances of mental disturbances. He examines the children and evaluates their aptitudes, which is helpful in speech education as well as considering placement in a special or normal school. At 15 years of age, he submits recommendations on type of employment.

Some of the children live in bad social surroundings or in broken homes and, to avoid lack of proper care, the child may be removed from the home and placed in a home for youngsters. It is necessary to keep in touch with these homes so that the rehabilitation program of the patient will pursue without interruption.

Timing of Treatment

I have described the role of the specialists and the regional workers in this treatment complex, and I would now like to concentrate on the movement of the patient between the various disciplines.

Since January 1, 1964, the regional pediatrician is obligated to report congenital anomalies. It is from him that we obtain information about all of the anomalies that are to be treated at our Clinic. The first witnesses of the mother's disappointment are the obstetrician and the pediatrician of the newborn department or the district pediatrician

and it is their obligation to instruct the parents of the possibilities of treatment and the need to assume a normal role in society. We have found that an informed family is a more cooperative family, which is necessary to the program.

The district pediatrician or the pediatrician of the newborn department refers the patient to the plastic surgery clinic for consultation. A group evaluation is performed by the surgeon, the pediatrician, and the stomatologist, who propose a surgical program as well as ages at which it is to be carried out. The mother is instructed in the general care and feeding of the infant prior to hospitalization. The infant being presented to the hospital for admission must have documents from the district pediatrician certifying that the baby is in satisfactory condition and that no contagious disease is present in the home. The mother is hospitalized only in exceptional cases when she is still nursing the child. The Clinic pediatrician decides if the infant is ready for hospitalization and surgery.

The patient is retained in the hospital about ten days after the operation. When discharged, the parents are instructed about feeding and home care of the wound. They are also given an appointment for future Clinic visits and/or further operative procedures. In addition to the initial examination shortly after birth, the patients are seen in their second, third, fourth, seventh, eighth, tenth, twelfth, and fifteenth year.

Schweckendiek's operation is performed on the palate, which assists the patient in feeding and speech development and tends to minimize upper respiratory and ear infections. At three years of age, the palate having previously been closed, we recommend the admission of the child to a nursery school, where there is an opportunity for the patient to imitate the speech of noncleft individuals in the same age group. The child readily adapts to this environmental situation.

At four years of age, speech therapy is instituted. If the speech pattern does not progress successfully, we propose admission to a boarding school, where concentrated speech therapy can be carried out. We prefer to do this before the individual enters school. Even though the speech pattern may develop in a satisfactory manner, we still examine the patient periodically until he is 15 years of age to be certain of our end result.

Between two and one-half and three years of age, orthodontic treatment or maxillary orthopedics is instituted to improve maxillary-mandibular relations. A dental appliance is constructed to fill any voids in the dental arch, this being helpful to the speech therapist. The nurse instructs the parents and the patient in the care and insertion of the orthodontic or dental appliances. All dental extractions are performed in our Clinic. A report with instructions is sent to the teacher in a boarding school for speech therapy to aid the teacher in the patient's daily supervision and care. We examine all boarding school patients at

the beginning and end of their school term. Most of the speech therapy, orthodontic care, and surgical services are performed during the preschool years. At six years of age, the cleft of the soft palate is repaired.

The anterior oro-nasal communication of the hard palate is repaired about 12 years of age, unless it is possible to perform a closure without wide mobilization of the muco-periosteum. With closure of the cleft of the alveolar ridge and anterior palate, it is possible to proceed with a bone graft and final prosthetic adjustments between 16 and 18 years of age.

Dental appliances are constructed by specialists in the Stomatology Clinic, who must have some information about the surgery and orthodontic work that has already been performed. We prefer fixed dental appliances in restoring dental deficiencies. The regional workers are permitted to construct dental appliances only after they have attained adequate knowledge and experience in the field. In adolescence, attention is directed towards final adjustments and to corrective surgery upon the nose and jaws. The school doctor will, at this time, request recommendations on job potential for the patient. The patient is evaluated from an esthetic, speech, and psychological point of view, and a type of employment is recommended, based upon the individual's potential and his deformity, We are particularly anxious to place a patient in an environment where he is least apt to suffer psychological trauma.

Summary

I have tried to give you some insight into the way in which we manage patients with clefts of the lip and palate in the region of South Moravia in Czechoslovakia. The location of our Clinic and the procurement of qualified personnel has been something of a problem; however, the cooperative effort of specialists in clinics nearer the patient's home does complement the work of our Clinic. We cannot overemphasize the advisability of cooperation on the family's part, for without their devoted patience and care, we would wait in vain for a good result. The time the doctor devotes to parental instruction is time well-spent. It is likewise important to establish a good cooperative relationship with the family doctor.

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