SPECIAL NEEDS DENTISTRY

Special Needs Dentistry deals specifically with the preventative oral health, treatment and rehabilitation of individuals who, albeit only temporarily, may find themselves in particular conditions: people with intellectual or sensory disabilities, people suffering from diseases limiting their mobility or ability to cooperate, and/or those with chronic disabling pathologies, trauma outcomes, genetic diseases, rare diseases, people with frail health, and people with diseases that make dental treatment critical. In dentistry, a "Special Needs Patient" is an individual whose therapeutic procedures require approaches and timescales that differ from routine practice. The purpose of Special Needs Dentistry is to allow this type of patient to be treated, consistent with the clinical picture and their degree of cooperation, in a similar manner to the rest of the population, both in terms of effectiveness and quality. The dental visit of a special needs patient requires an approach and method befitting to the degree of cooperation and autonomy of the patient. Too often a patient is defined as uncooperative, or at risk should they require a specific space, professional qualifications, or team capable of dealing with their condition. Dental treatment and oral health care for persons with disabilities must be provided following the same principles that are exercised for the rest of the population; naturally, it must be taken into account that the complexity of the treatment may be influenced by the severity of the actual disability.

These guidelines consider:

1. Cooperative and autonomous special needs patients; 2. Special needs patients with low levels of cooperation and autonomy; 3. Non-autonomous special needs patients capable of cooperating or with a lack of cooperation; 4. Uncooperative special needs patients.

A patient with a certain frailty and/or disability may, over time, alter their degree of cooperation or autonomy, therefore they should be periodically assessed during check-ups. The anamnestic data collected during the initial visit should include the essential information to assess the general state of health of the patient, but should also include a series of information to ascertain the degree of the individual's cooperation and autonomy.

314 During the first visit, it is necessary to assess the degree of the individual's cooperation and autonomy. The patient's clinical documentation, which certifies the state of the patient's oral health and a consequent treatment plan, are useful to facilitate communication between the dentist, the patient, the latter's family, and any other figures involved in the implementation of the patient's prevention and treatment plan. The fundamental premise of any health treatment is consent, freely expressed by the patient and based on information relative to all aspects of the treatment for which consent is sought. The information must also accurately cover any problems that may arise during and after each treatment, as well as highlighting any therapeutic alternatives to the intended treatment. The practitioner must be familiar with the legislation related to cases of limitation of mental capacity illustrated in the measures of interdiction, incapacitation and in the role of the guardian. These are fundamental requisites in order to correctly identify the person entitled to consent to the treatment.

It is essential, therefore, that the practitioner establishes a preferential channel of communication directly with whosoever is responsible for the individual to receive treatment, if the latter is incapable of making decisions autonomously, in order to streamline all the formal and significant aspects related to the execution of the dental treatment. It may happen that the practitioner has the consent of the family and/or the guardian requesting treatment, but the individual concerned refuses consent, often for reasons of anxiety and/or phobia. In this regard, and contrary to what one may imagine, it must be taken into due consideration that "a patient's consent to health treatment is a fundamental human right, the individual concerned is the sole person capable of giving consent. In the event of potential conflict with the legal guardian, the will of the person concerned is paramount". It is therefore evident, in virtue of the above, that, in the case of an individual over the age of 14, not subject to an interdiction measure and affected by mild or moderate intellectual disability, which does not, however, constitute mental incompetence, the practitioner may not proceed with the treatment, even if deemed necessary and urgent.

315 In such situations, current legislation does not provide for the Compulsory Medical Treatment (CMT) procedure as this is reserved for psychiatric treatment only; the only way forward is to persuade the patient to undergo dental treatment by giving his or her own consent. When informed consent cannot be given by the patient, it must be given by their legal guardian. In some cases, however, this is not sufficient: it is also necessary to have the patient's consent.

1. Cooperative and autonomous special needs patients: this definition includes all fragile health conditions. This type of patient does not differ in treatment from any other patient except for the precautions to be taken according to the associated pathologies that constitute the element of increased risk during treatment. The scope and complexity of the pathologies present in medical fragility do not allow for the specific description of each treatment procedure suitable for each single pathology, this should be dealt with by a broader and more appropriate range of operative protocols.

2. Special needs patients with low levels of cooperation and autonomy: in this category we find pathologies that may require specific "psychological management" skills. Treatment includes skills that require specific training of the entire dental team. In some cases it is useful to familiarize the patient with the surroundings prior to the actual treatment, bearing in mind also that the process of growing accustomed to the "new situation" can be very long and require several visits.

3. Non-autonomous special needs patients capable of cooperating or with a lack of cooperation: these are patients who, due to fragile health or mental and/or physical disabilities, have lost the ability, or have never been able to perform correct oral hygiene routines. In some cases, a domiciliary visit may be the most suitable initial approach, also to provide the practitioner with information on possible situations that may hinder or make the treatment process difficult.

316 Very often, the standards of oral hygiene and plaque control in these individuals are low due to lack of autonomy and/or ability and/or cooperation. Proper tooth brushing is essential to remove plaque and food deposits, and maintain healthy gums and periodontium.

The technique is less important than the effectiveness achieved in removing plaque, and the support of parents or caregivers in brushing techniques may be necessary for their entire life. The dentist and/or dental hygienist, following the dentist's instructions, are the figures who provide the correct oral hygiene information to be carried out at home, often "customizing" it for the patients. They must listen and understand the difficulties parents or caregivers have in carrying out such oral hygiene. When preparing a treatment plan, it is necessary to take into account the degree of oral hygiene and periodontal health. Poor oral hygiene negatively affects the success of the treatment and the duration of the expected results.

4. Uncooperative special needs patients: Diagnosis in the uncooperative special needs patient presents particular difficulties due to the impossibility of collecting anamnestic data directly. Occasionally the physical examination must be completed under deep sedation or narcosis, both provide the same conditions required to perform the exam. It would appear clear, therefore, that in the vast majority of cases, these patients require a clinical environment with an appropriately equipped surgery and specialized personnel. Uncooperative special needs patients in pain are often unable to express their discomfort in words, they may instead manifest a change in their behaviour through various conditions: loss of appetite, reluctance to perform routine activities, disturbed sleep, irritability, forms of self-harm, etc... It is important, therefore, that the people closest to the special needs individual can detect these changes and quickly alert those responsible for the prevention and treatment of oral diseases.

317 Collaboration and communication between the patient, family and/or guardian and health practitioners become crucial elements in the preparation of an effective and customized treatment plan. In consideration of the above, particularly with regard to the difficulties that may arise in undertaking a therapeutic course with these patients, great attention must be paid to the prevention of odontostomatological diseases. In special needs patients in need of odontostomatological care, the frequency of professional intervention fundamentally depends on the needs of the individual. Furthermore, the fact that the need to resort to deep sedation or general anaesthesia may influence the frequency of interventions must also be taken into account. When treating people with special needs who require deep sedation or narcosis, it is advisable that preventative treatment such as oral hygiene and sealing of pits and fissures is performed in the same session. In some cases, frequent visits to the care facility can help familiarize the patient with the surroundings and eliminate the need for general anaesthesia. At any rate, a common path should be shared with the family or with the facility caring for the patient, and a multi- and interdisciplinary approach should be implemented. It is good practice that on termination of the treatment plan, patients follow a care pathway characterized by preventive sessions, also attempting professional hygiene in the clinic, to be performed with manual instruments and/or ultrasound, by a hygienist or a dentist. These sessions should be repeated depending on the general dental situation and the degree of home hygiene achieved. Based on the practitioner's assessment of the special needs patient, it may be appropriate to schedule several checkups during the year. Furthermore, specific food hygiene programmes should be integrated into the prevention and treatment process.

The personal relationship created between the dentist - dental hygienist - patient is very effective for the promotion and education of oral health care. This may be considered appropriate for individuals with mild or moderate intellectual disabilities, and the role of the dental hygienist is useful in the implementation of this preventive strategy. Caregivers responsible for the oral health of special needs individuals must receive adequate support and specific training.

318 Correct health policies should ensure, for preventative purposes, reasonable access times to the facility, where it is possible to safely perform deep sedation, general anaesthesia and post-op recovery. It is equally important to guarantee facilitated healthcare paths for special needs patients in consideration of the fact that they are not able to independently access the health facilities. The techniques implemented with patients undergoing odontostomatological surgery will be the same as those used with the general population. When patients are under general anaesthesia, it is recommended to perform as many treatments as possible. It is a good rule for surgical interventions to be performed at the end of the session, so as to prevent any bleeding from hindering completion. The use of absorbable thread is recommended for sutures. During dental treatment sessions of various kinds performed under narcosis or deep sedation, surgical treatments must be performed at the end of the session. Where possible, it is recommended to carry out other specialised treatments during the same therapy session. In the case of conservative dental care, techniques that complete therapy in a single session are preferable. In the case of endodontic treatment, the special needs patient requires protocols that allow the completion of the therapy in a single session, including tooth reconstruction. Treatments of a conservative and endodontic nature under narcosis must be completed in the same therapy session. The use of surgical methods must be carefully evaluated on a case-by-case basis. In fact, inadequate plaque control can easily counteract the therapy practiced. In order to maintain optimal oral health, these patients must be part of a periodic check up programme, for plaque removal and/or polishing, with variable and individual frequency depending on the case; in some cases, it is also necessary to programme tartar removal every 2/3 months, both because of the inability to maintain proper oral hygiene at home, and because of the lack of patient cooperation during the hygiene session. In such cases, the repetition of short-term hygiene sessions makes it possible to perform effective treatments thanks to the reduced accumulation of tartar.

319 Periodontal interventions should be evaluated on a case-by-case basis, taking due account of the fact that, at the end of the therapy, the patient may not be able to follow a correct and adequate level of oral hygiene at home. Orthodontic treatment in patients with intellectual disabilities is related to the anatomic-functional situation of the oro-facial district, associated with the degree of patient cooperation. In light of the above, it is clear that orthodontic treatment can be carried out with fixed devices where it is possible to maintain adequate oral hygiene either independently, or with assistance. The use of mobile devices has proven difficult. The few successful mobile devices used are those aimed at improving swallowing, phonation and facial mimic musculature: functions of fundamental importance. Check-ups are variable according to the type of orthodontic device, the complexity of the case and patient cooperation: in line with normal orthodontic clinical guidelines.

The motivation of parents/guardians/caregivers plays a fundamental role in orthodontic treatment. Orthodontic treatment in patients with intellectual disabilities is related to the anatomic-functional situation of the oro-facial district, associated with the degree of patient cooperation. The possibility of being able to perform orthodontic treatment must also be assessed on the basis of the ability to maintain good oral hygiene. Prosthetic treatment requires a careful assessment of the effective cooperation of the patient, and the ability to manage prosthetic devices, especially mobile ones. In general terms, the use of fixed prosthetic devices is preferable. In the preparation of the prosthetic rehabilitation plan, the real ability to maintain adequate oral hygiene conditions, and the fact that therapeutic sessions must be as few as possible should be taken into particular consideration. Implant-supported prostheses are an alternative to the use of mobile devices. However, in uncooperative patients, aside from the difficulties of the intervention itself, the diagnostic phase is also problematic, requiring tests such as OPG, CAT, 3D cone beam imaging scans, tomography, which entail obvious complications.

320 Similarly, taking dental impressions, undoubtedly more complex for normal implant methods, represents an obstacle to achieving a good therapeutic result. Where possible, in uncooperative patients, prosthetic rehabilitation with fixed devices is preferable. Surgical treatment of uncooperative patients requires a careful assessment by the practitioner of the time required, a factor which is often not previously estimated, especially when a thorough initial examination was not possible. Therefore, the treatment plan is often at the practitioner's discretion; this can also lead to a different evaluation of the choices made, with possible legal medical implications. For this reason, in order to avoid possible litigation, a clinical log is of vital importance, as the practitioner can precisely explain the reasons why one course of action was preferred over another, without ever taking anything for granted. Treatment under narcosis becomes critical in the uncooperative patient when it aims to resolve clinical situations that in themselves, are not serious enough to justify the risks involved, but which, if not resolved, result in a progressive pattern with negative and disabling implications for the affected individual. This case, by way of example, is represented by a totally uncooperative patient with a large build-up of tartar. It is clear that the individual can only be treated under narcosis; and, in any case, equally evident that the use of the operating room, with the risks and costs involved, appears totally disproportionate to the problem presented. However, this problem, if not addressed with this approach, cannot be resolved. On the other hand, failure to solve the problem will result in an evolution that in the medium term can imply tooth loss and further compromise the patient's health. These situations must be carefully assessed in collaboration with careful and accurate anaesthetic consultation in order to choose the most suitable narcotic technique.

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