

# TREATING SPECIAL NEEDS' PATIENTS IN PISA, ITALY

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I often have the opportunity to treat children and adults with special needs in my practice, although it is mainly a private practice dedicated to periodontology and implantology. My father, who is also a dentist, and works in the same dental clinic with me, is a Knight of the Sovereign Military Order of Malta. As part of his voluntary work, he started to frequent a charitable institute in Pisa, the city where we live. Then, about five years ago, because of the fact that he is a dentist, a collaboration between our clinic and patients of the institute came into being. The special needs patients we treat most frequently are children affected by Down Syndrome and adults affected by various types of dementia. The most common oral diseases I come across in special needs patients are mainly related to the limited ability they have to maintain sufficient oral hygiene, resulting in a high incidence of carious and periodontal disease.

### **DOWN SYNDROME CASES**

Down Syndrome is the most frequent malformation pathology. It occurs in one out of every six hundred births and represents about one third of all psychic childhood handicaps. Down Syndrome patients respond well to treatment in a private clinic because most of them are trusting and willing to co-operate. We can distinguish two different ways to treat these patients: the first is the psychological approach combined with or without light sedation with azoteprotoxide or benzodiazepines per os; the second is hospital treatment combined with narcosis. According to recent data, about 90% of patients can be treated in private clinics and only 10% need to be sent to hospital to be treated with narcosis.

The psychological approach consists of a few sessions in the presence of their parents or their tutors. These meetings are necessary to build up a relationship of confidence and reliance between the patient and the dentist and the members of the staff ( the role of the dental hygienist is of primary importance ) and to allow the patient to become familiar with the equipment in the clinic. Such a way of dealing with the case makes the patient feel at ease, and as a result, invasive therapy is not felt like an aggression against himself, thereby causing negative psychic reactions. So the first approach is limited to giving the patient the experience of the "dental environment". Afterwards we try to illustrate and to explain to the patient the dental disease he suffers from, the need for treatment and the type of treatment we are going to perform. Then we start with very simple and non-aggressive therapy such as oral hygiene instruction, and we adjust the treatment planning according to the reactions we observe in our patient. But the most fundamental part of the therapy is related to teaching the patient and whoever assists him daily, the oral hygiene procedures best suited to maintain the highest level the patient can reach regarding plaque control, in order to reduce the number and the complexity of future treatments.

It is also very important to try to minimize as much as possible the stress the patient suffers in relation to dental therapy. For this reason we divide the treatment into different sections and we perform optimal pain control. In this way, we seek to prevent an adverse reaction to the dental treatment which could cause an epileptic attack. In fact, at the anamnesis, it is frequent to find an association between Down Syndrome and epilepsy and Down Syndrome and various cardiac pathologies. For this reason we prescribe antibiotic therapy before performing any type of invasive treatment. Besides we keep available in the clinic vials of benzodiazepines and are very careful to carry out all the necessary procedures to ensure the physical safety of the patient who might be affected by an epileptic crisis (eg. tongue bites).

### **ADULT PATIENTS WITH DEMENTIA**

The pathology I have treated more frequently in adults is dementia. This can be a pathology related to neonatal suffering, traumas and genetic disease, or secondary to degenerative or dystrophic neurological diseases. Acquired dementia in adults is most frequently caused by Alzheimer disease (70% of cases) and by vascular dementia caused by multiple infarct related to arteriosclerosis.

The prevalence of dementia over 65 years is 10 % and it increases with the increasing age. Besides, survival of these patients is quite high (>10 years), so they represent an important area of special care. The symptoms are characterized by defective memory for recent events, cognitive disorders, aphasia (problems in naming objects), apraxia (deficiency in performing actions), an inability to think (planning, organization), and also by anxiety, depression, aggressive behaviour, insomnia and extrapyramidal motor disturbances. Very often these patients are not self sufficient any longer; they are not able to call at the clinic by themselves, to take therapies by themselves, to face an emergency, or to adapt themselves to new behaviours.

Of course, in these cases also, dialoguing with the patient and consulting the patient's doctor enables the dentist to evaluate whether a certain dental treatment is suitable or not in relation to the patient's possible co-operation and to prognosis of the systemic disease. At the onset of the symptoms, we plan the elective dental treatment and any possible prosthetic restorations. When the disease becomes more severe, dental treatment obviously has to be limited to the essential, mainly restorative dentistry and endodontics. If we have to supply a prosthesis, we make it as easy as possible to manage to allow for the patient's loss of manual ability ( apraxia ).

Also, in these cases we have to be very prudent, persuasive, and encouraging. We speak slowly in a way that is easy to understand, trying to explain the steps of the treatment we are going to perform. It is important that a single treatment session is not very demanding on the patient. Besides, the amount of anaesthetic we use in a treatment session must be reduced (not more than three vials) to avoid interactions with possible psychiatric therapies. Moreover, we use anaesthetics without adrenaline because of the presence of cardiovascular disease.

## **PATIENTS WITH NEUROMUSCULAR DISORDERS**

The treatment of children or adults affected by severe pathologies of the neuromuscular system which involve deglutition disorders and uncontrolled movements due to abnormal psychic reactions or neurological disease and spastic syndrome is more difficult. In all these cases, our lack of specific training means we have to send such patients to hospital.

## **CONCLUSION**

At present, the Health System in Italy has negotiated with hospitals to pay for all costs of dental care for patients with special needs. If this agreement was extended to private practitioners, it would be possible and desirable for general dental practitioners, in less advanced pathologies, to succeed in treating patients affected by systemic diseases and handicaps by giving them continual dental care in a dental clinic, probably at a lower cost for the community. This would not discriminate against any patients with special needs. In fact in many cases, it would benefit them and their families by allowing to be treated locally. Where severe pathologies exist, hospitalisation for treatment will still be necessary. If general practitioners in Italy were seen to be treating special needs patients, not only would it improve the image that people have of dentists, even more importantly, it might re-awaken in our profession the ideals of care for patients with special needs and the necessity for social co-operation.

### **Note:**

*The patients treated by Dr Bandettini and his father are residents at the Casa Cottolengo Charitable Institute run by nuns in Pisa. As yet, there is no hospital department in the area available to treat special needs patients. The nuns pay only for the technicians' fees incurred in the Bandettinis' practice, but they do not receive any refunds from the Italian Health System. Ed.*

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