EXCLUSIVE TO *VITAL!*
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Special care dentistry and the dental team

By **June Nunn**, Professor of Special Care Dentistry and **Tina Gorman**, Director of Nursing, Dental School and Hospital, Trinity College, Dublin

Special care dentistry (SCD) is that specialty of dentistry that aims to facilitate oral care for people with an impairment or disability, for example, those who have a physical, sensory, intellectual, mental, medical, emotional or social impairment or disability or, more often, a combination of these that means accessing conventional dental care presents challenges.

Background

In the UK, people with disabilities, a significant number of whom are elderly people, live in their own homes. Increasingly, residents of long-stay institutions live in sheltered housing in communities with carers. There is still the opportunity for respite care to assist carers.

Special schools provide education and training for many children and adolescents from two to 19 years of age although increasing numbers are taught in mainstream schools with close support from specialist teachers. Sheltered workshops give employment to some disabled people and others combine this with paid employment. It is a requirement that businesses employing more than five people must offer work opportunities to a disabled person.

The Disability Discrimination Act 1995 has far-reaching consequences across all sectors of society in the UK. In dentistry, practices have had to make reasonable provision for access to people with disabilities such as ramps, lifts and communication aids. It is illegal to discriminate against such persons on the grounds of their disability alone. The Human Rights Act 2000 also imposes a duty of care on health professionals with respect to care offered to disadvantaged groups. More recently, the Mental Capacity Act (2005) brings greater clarity around, for example, proceeding with dental care where an adult lacks the capacity to give, or withhold, their consent for treatment. The Act and its accompanying Code of Practice were implemented in 2007.

Consent

In order to give consent for dental care the dental team has to confirm that the person:

- Is competent to make a decision
- Has been informed – reasons, options, consequences
- Has understanding – demonstrate ability to weigh up pros and cons
- Is not to be coerced – respect autonomy, respect a person's right to choose and self-determination.

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In the UK, an adult is defined as someone over 16 years of age, which is the legal age of consent. No-one else can consent on his or her behalf, not even if the patient has an intellectual impairment. It is wise to involve parents/carers in the discussions and decision making and advisable to get the agreement of a second clinician on any proposed treatment plan, especially where general anaesthesia or sedation are involved. Every effort should be made to find a communication aid that assists the patient in this process (Fig. 1).

There are other considerations in relation to the capacity to consent. It may be task specific: to consent to have teeth cleaned is one thing, but to have third molar surgery under conscious sedation is quite another. Capacity to consent may be variable from one occasion to another; a person may be temporarily or permanently impaired, as for example with the brain-injured person in whom it is anticipated that they will make a good recovery.

Elective treatment can be deferred until that time. It is, however, the responsibility of the clinician to decide – can the patient understand, reason, recall and apply information? The help of carers, or even an advocate who can act as an intermediary is helpful. The practicalities of obtaining consent are not straightforward; the law varies from country to country and is often reliant on case law as well as the legislation in each place. For children, the parent or legal guardian is usually the person who can give consent. If it is judged that a young person below the age of consent is Gillick competent, then they may be free to consent to, or refuse, treatment and parents cannot override this decision.

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Guidelines for care

Clinical governance dictates that high-quality care is delivered in an effective and efficient way. To that end, working to clinical guidelines is essential particularly when resources (money, manpower and facilities) are scarce.

The British Society for Disability and Oral Health has a number of clinical guidelines and these are available on the Society’s website (www.bsdh.org.uk).

Voluntary sector

Oral health care can be optimised by a good working relation with the voluntary sector. Many organisations have dental advice leaflets (eg Parkinson’s Disease Society, www.parkinsons.org.uk) and work as advocates to facilitate the setting up of dental care for individuals (eg Ectodermal Dysplasia Society, www.ectodermaldysplasia.org) as well as lobbying politicians to bring about improvements in services, benefits and the education of others, such as the Disability Partnership (www.disabilitypartnership.co.uk).

Carers

Carers play a vital role in the lives of many people with disabilities when parents are no longer directly involved in day-to-day living (www.carersuk.org). For more dependent people, carers are responsible for oral hygiene practices as well. Such individualised instructions need to be incorporated into the care plan of people who are unable to provide self-help. Carers need close support from the dental team to ensure that oral hygiene measures are clinically effective. The turnover of carers is high and training in oral hygiene skills needs to be part of their induction procedures. There are training packages to help in training carers in oral hygiene measures.

Facilities for oral and dental care in the UK

People with disabilities are able to access care through the General Dental Service (GDS) either as National Health Service (NHS) or private patients or under the Personal Dental Service, where most dentists work under a salaried contract with primary care trusts (PCTs). Alternatively, the Community Dental Service (CDS) provides a range of care for people unable or unwilling to access care through the GDS and where more specialised services, such as sedation and dental care teams with the skills to provide care to disabled people, are available. The hospital dental service in district general or dental teaching hospitals offers secondary or tertiary care for people whose impairments are such that dental treatment needs to be provided in a hospital with access to special facilities, equipment or expertise. Some patients will require dental care to be delivered to them as inpatients, for example, patients who are severely medically compromised such as people with a complex heart defect or unstable epilepsy, so that they can be monitored and their dental treatment provided safely. Dental care under general

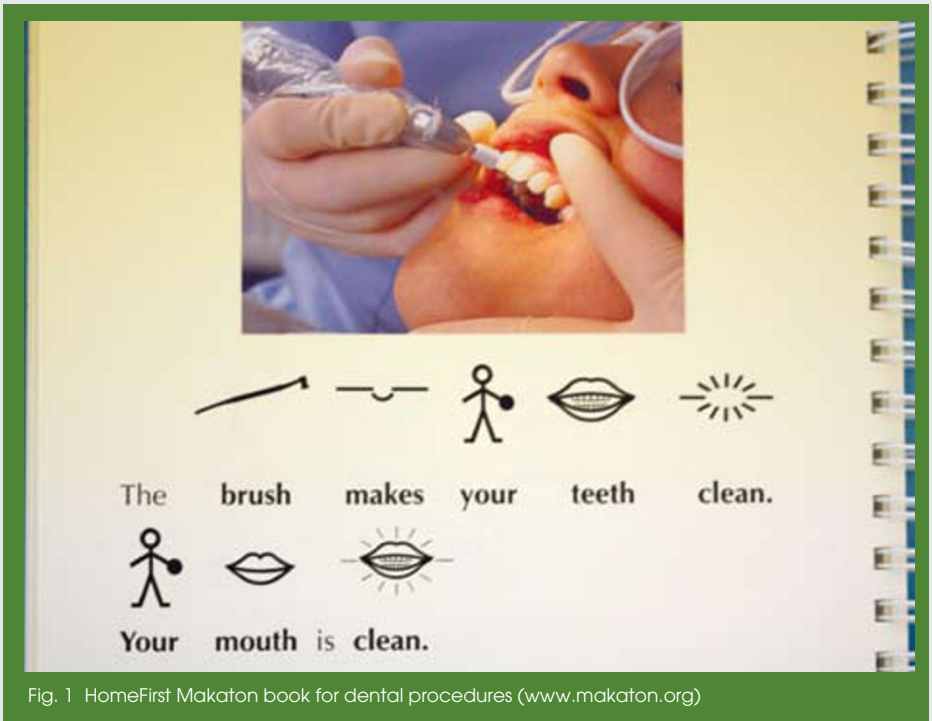

Fig. 1 HomeFirst Makaton book for dental procedures (www.makaton.org)

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> 'Once risk assessments are carried out protocols and guidelines should be documented and training implemented for all staff.'

anaesthesia (GA) can only be provided in hospitals.

Domiciliary services are provided in a limited way by general dental practitioners as well as dental hygienists and by staff in the CDS who hold a bank of mobile equipment. This may be loaned from the PCT to general dental practitioners providing such a service. Depending on the resources available, services may be offered to special groups such as homeless people, those in psychiatric units and people in prisons.

A practical approach

It is important when providing dental treatment for this group of patients to ensure that all staff have had suitable training in appropriate clinical holding techniques whether the patient is having treatment within a clinical environment or in a domiciliary setting. This training should be devised in accordance with the Manual Handling Operations Regulations 1992. All activities should have a risk assessment carried out to help identify the most appropriate method of moving or handling for that task.

The 1994 American guidelines on the use of Physical Intervention/Clinical Holding are sensible; these state that physical interventions should only be used in situations where:

- It is necessary for safe and effective treatment
- It is not for punishment or for the convenience of staff
- It is the least restrictive intervention used
- It will not cause physical trauma and minimal psychological trauma
- It is expected that reasonable benefits will result from the treatment
- There is consent for treatment
- There is consent for physical intervention
- The intervention is specific to the planned treatment
- Dental staff are trained in safe physical intervention
- There is clear documentation of type, duration and reason for use of physical intervention.

The British Society for Disability and Oral Health (2009) has formulated guidelines on physical intervention for dental care, to include the indications above, and these can be accessed via its website (www.bsdh.org.uk).

Such intervention, or Clinical Holding, may be appropriate, for example, for people with the spastic form of cerebral palsy where movements may be involuntary and unpredictable as also they may be for people with multiple sclerosis or Parkinson's disease. People who have had a stroke (CVA) or have an acquired brain injury may also be helped to receive dental care safely by this approach. Clinical Holding may be as simple as holding hands and head in reassurance to the use of Tumle® Cushions (Fig. 2).

When setting up a 'new' clinical environment to provide treatment for special care patients, risk assessments will aid in the laying out of the surgery, taking good ergonomics into consideration to promote health and safety, and to give comfort and ease of use which equates to an efficient workforce.

Once the risk assessments are carried out protocols/guidelines should be documented and training implemented, so that all staff are aware of correct manual handling procedures. This training should be mandatory and updated at regular intervals.

Alternative delivery systems

Surgery equipment

Dental surgeries need to be able to accommodate wheelchairs and walking frames. There are building regulations governing the dimensions of a surgery or theatre where care needs to be provided.

The sight of dental equipment evokes fear in many people and efforts should be made to place equipment behind cabinetry where technically possible. In principle, side delivery for handpieces, 3-in-1 syringes, curing light guides and ultrasonic scalers are preferable, particularly for disruptive patients. Surgeries should have facilities to transfer patients safely from wheelchairs, either with a hoist or in a purpose-built chair. There are dental units which allow a patient's wheelchair to be bolted onto the base unit in place of the conventional

Fig. 2 Tumle ® cushions to support an adult with cerebral palsy and dysphagia

Fig. 3 A mouth prop to enable easier access for toothbrushing

Fig. 4a 'Superbrush'

Fig. 4b Collis Curve brush

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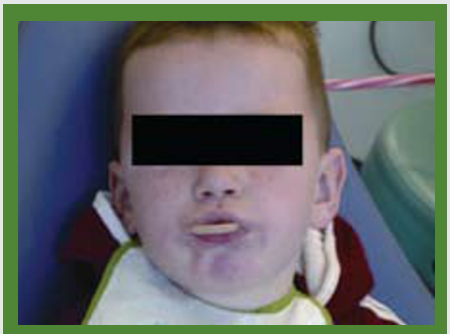

Fig. 5 Child using an oral screen to improve lip competence

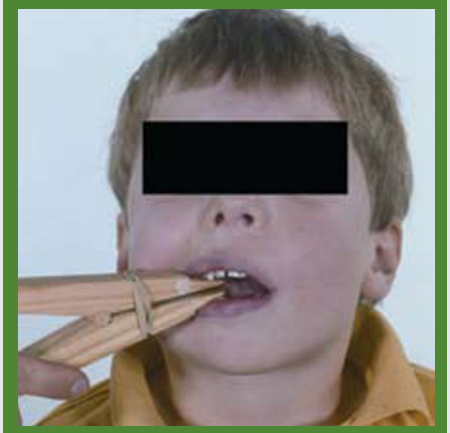

Fig. 6 Child with Worster Drought syndrome and custom-made exercise appliance to encourage mouth-opening

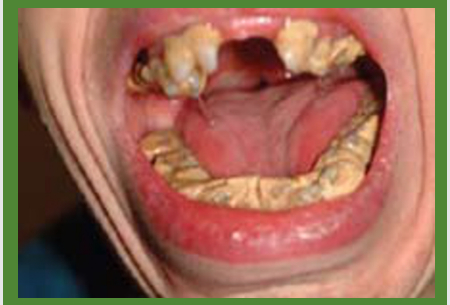

Fig. 7 Gross calculus deposits in an adult who is PEG-fed (nil by mouth)

chair. The alternative is to use a special wheelchair ramp to allow a wheelchair to be reclined so that the operator and assistant can access the patient more easily and safely.

Facilities for piped gases for inhalation sedation as well as for emergencies are desirable. Portable equipment allows the dental team to carry out a limited range of restorative work as well as preventive care, extractions and most routine prosthetic work away from a surgery. There are significant health and safety issues in relation to domiciliary care, not the least of which is safety in unfamiliar houses/areas, carrying heavy equipment and the safe disposal of waste.

Special mouldable supports are available on the market to accommodate people in the dental chair who have for example scoliosis, or cushions which hold patients, without physical intervention, where there is a behaviour management problem (Fig. 2).

Prefabricated finger guards (www.dental-directory.co.uk) (Fig. 3) can be helpful in avoiding being bitten when examining patients who have uncontrolled movements. Non-breakable mirrors are advantageous with such patients as are hand-held intra-oral lights or head lamps.

Aids and adaptations

Commercially available mouth cleaning aids such as modified toothbrush handles, powered toothbrushes and modified brush heads, eg Superbrush® (www.dentocare.co.uk) or Collis Curve™ brushes (www.colliscurve.co.uk) (Figs 4a-b), help carers with oral hygiene routines. Custom-made devices may need to be made in conjunction with a technician. For example, appliances to help with drooling (Fig. 5), occlusal splints to protect teeth for patients who have bruxism or gastro-oesophageal reflux and exercise devices (Fig. 6) for patients with restricted opening, eg arthrogryposis, hemifacial microsomia and juvenile idiopathic arthritis.

Diet

In patients for whom the impairment affects the ability to chew and swallow (dysphagia), food may be liquidised. Such consistency means that the food item is often retained around the mouth for prolonged periods, and even lodged for days in a high-vaulted palate. Carers need to be made aware of the potential for this to happen and guidance given on clearing old food residues from more inaccessible places. Using a toothbrush handle or a smooth, rounded spoon handle can be relatively efficient and less traumatic than toothbrush bristles. Patients who are on prescribed food supplements because of growth failure are given nutrients that are often high in non-milk extrinsic sugars (NMES) and the way and frequency with which these are consumed make such patients vulnerable to dental caries. However, the need for adequate nutrition outweighs the disadvantages of dental caries and this needs to be managed with aggressive dental prevention.

Tube-fed patients or those who are fed via a PEG (percutaneous endoscopic gastrostomy) and have nothing by mouth often accumulate large quantities of calculus (Fig. 7). Removal of calculus from surfaces adjacent to the gingivae is important since gingivitis and halitosis can be significant problems. Calculus covering occlusal surfaces is less of a problem. Scaling needs to be undertaken with good, high-speed suction to avoid calculus being inhaled by a patient whose airway is vulnerable because of impaired swallowing.

> ‘Modified toothbrush handles, powered toothbrushes and modified heads help carers with oral hygiene routines.’

For carers, suction brushes are available for use with patients who may not be able to swallow well and in whom managing toothpaste and oral secretions during toothbrushing would be a problem and an inhalation risk. Patients who have a PEG often have had, and some continue to have, gastro-oesophageal reflux and the aspiration of stomach contents into the mouth puts the patient at risk of, amongst other things, dental erosion. The dental team needs to be aware of the potential for this to happen.

Relevant reading

- British Society for Disability and Oral Health. *BSDH Guidelines and Policy Documents for oral care of people with disabilities*. www.bsdh.org.uk/guidelines.html.
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