# Oral Health and dental treatment of adults with disability, a problem and solution

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#### Abstract

People with disability have a poorer level of oral health than those who do not have a disability. This may be partly due to reasons of reduction in preventive care but also lesser opportunities for the provision of restorative dentistry. The use of a special management technique using intravenous conscious sedation provides a valuable opportunity to open doors that can help reduce the inequality that is experienced by people with disability.

Keywords: Dental treatment problems; Conscious sedation; Oral health; Disability

### Introduction

People with disability have a poorer oral health than those who do not have a disability [1]. For some this is partly due to problems in maintaining good oral hygiene as a result of their limitation in manual dexterity. The importance of dietary control with the frequent intake of sugary foods may not be fully appreciated by those whose cognitive ability and communication skills are reduced [2]. These issues of prevention are important, however for people with a disability the opportunities for treatment are also reduced [3].

For many people with disability all aspects of dental treatment may be provided in the conventional form using local anaesthetic and careful gentle patient management. However for some individuals with challenging behaviour and or movement features dental care will be difficult perhaps resulting in undiagnosed oral health problems. For these reasons some degree of pharmacological intervention may be required. This can vary from general anaesthesia to conscious sedation. General anaesthesia for dental treatment can now only be provided in the UK in a hospital environment.

Complex restorative treatment and or periodontal treatment may require a course of visits and as multiple sessions of general anaesthetic should be avoided these options are generally not advisable. Even the provision of non-complex fillings may be overridden by the risk of further problems resulting in possible dental pain if the decay is extensive. An extraction removes this risk and is a decision that the surgeon may make in the patients best interest particularly for challenging patients for whom the possibility of dental pain can have serious behavioural consequences

As an alternative Intravenous conscious sedation can provide for people with disability an increased chance of having their teeth restored rather than simply extracted [4]. Evidence providing the option of conscious sedation strongly supports this alternative [5,6]. Intravenous conscious sedation can be provided by a single dental surgeon acting as an operator/sedationist within a primary care dental surgery assisted by a trained nurse. This enables the opportunity for a range of different treatment options to be provided safely over a series of appointments thereby potentially ensuring an improved standard of dental care.

#### Demonstration

Research has demonstrated the value of this technique for a number of reasons: Conscious sedation can be less expensive, more readily available as well as providing restorative dentistry rather than extractions.

Complex treatment and preventive periodontal care can be provided over a series of appointments. An

example shows the provision of a bridge to replace lower anterior teeth of an adult with severe choreic movements as a result of Huntington's disease [7] (Figures 1-3).



Figure 1: Patient showing missing lower anterior teeth.



Figure 2: Showing restoration of the lower anterior gap with a bridge.



Figure 3: Showing Bridge in place.

Conscious sedation makes available the possibility of investigations or treatments by other medical disciplines thereby enabling a truly holistic approach for the person with a disability This is shown by the case of an adult with severe brain injury [8]who had a variety of investigations over several years whilst having dental care using intravenous conscious sedation. (ie Blood taking, removal of cranial clips post-surgery, examination and syringing of ears, removal of ear wax, podiatry) Other cases have also demonstrated the value that intravenous sedation provides in holistic care [9]

The technique can and is readily available provided by a trained dental practitioner and dental nurse in a community general dental practice. For the adult with severe disability this may be more acceptable than attending a large busy hospital department.

### Conclusion

Training in the use of intravenous conscious sedation, is required urgently and to be more widely available particularly for those specialists treating people with disability.

An urgent need to commission and fund an appropriate dental service for adults with disability

Disability is a functional limitation with regard to a particular activity. Handicap refers to a disadvantage in filling a role in life relative to a peer group. It is the responsibility of the dental profession to decide if it wants to provide a handicap or prevent one?

## References

- 1. Public Health England Oral care and people with learning disabilities. PHE publications. gateway number: GW-198HTML. 2019.
- 2. Valuing people's oral Health A good practice guide for improving the oral health of disabled children and adults. Department of Health. 2007.
- 3. Hall M, Marshman Z, Owens J. Oral health among adults with learning disabilities in England 2010/11, in Better Dental Services for People with Learning Disabilities. University of Sheffield. 2012.
- 4. Boyle C.A, Lane H L. Sedation or general anaesthesia for Special Care Patients?. Prim Dent.J. 2020;9(2):56-61.
- 5. Skelly AM, Manley MCG. The use of sedation in the treatment of people with disability. In: Disability and Oral Care A Handbook. Ed. J.Nunn. FDI World Dental Press Ltd London. 2014; Chapter 10.
- 6. Manley MCG, Skelly AM, Hamilton AG. Dental Treatment for People with challenging behaviour: General anaesthesia or Sedation?. British Dental Journal. 2000;188:358-360.
- 7. Lane H.L. The oral health and oral health care of a group of people with Huntington's disease. A report submitted in partial fulfilment of the requirements for the Degree in Master of Science.
- 8. Manley MCG, Doshi M. The importance of oral health and the value of dental care in the process of rehabilitation for people with complex neuro-disability. Disability and Rehabilitation. 2020.
- 9. Wray L, Manley M.C.G. The Multi-disciplinary Use of Intranasal/Intravenous Conscious Sedation Four Case Reports Dental Update. Special Care Dentistry. 2017;41(10):907-910.