

Update on guidelines for selecting appropriate patients to receive treatment with dental implants: priorities for the NHS – the position after 15 years

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IN BRIEF

- Provides an update on the guidelines from The Royal College of Surgeons of England Faculty of Dental Surgery on selecting appropriate patients to receive treatment with dental implants.
- Provides clinical indications for treatment with dental implants.
- Suggests appropriate consultations, records and correspondence should aid in achieving an optimal patient outcome.

In 1997 the Faculty of Dental Surgery (Royal College of Surgeons, England) as part of a wider publication produced guidance on prioritisation for the selection of patients to receive treatment with dental implants within the NHS in the UK (http://www.rcseng.ac.uk/fds/publications-clinical-guidelines/clinical_guidelines/index.html). This update considers eight main groups who may benefit from treatment with osseointegrated implants. Where patients are being considered for implant-based rehabilitation, treatment plans must be weighed up against the risks, benefits and outcomes outlined in evidence-based research.

INTRODUCTION

The Royal College of Surgeons of England Faculty of Dental Surgery (FDSRCS [Eng]) develops and maintains a wide range of clinical guidelines to support the profession in maintaining the highest standards of clinical practice and patient care. This is achieved by working in conjunction with other stakeholders such as the Department of Health, National Institute of Health and Care Excellence (NICE) and professional societies.

The guidelines are the responsibility of the Clinical Standards Committee of the faculty and are either the work of the committee itself or the endorsement of work by other bodies such as professional societies.

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Over the past 15 years there have been many changes in the NHS. At the same time the predictability of dental implants and the expectations and demands of patients has moved to a position where dental implants are now seen as a routine treatment option when considering the restoration of missing teeth. The Faculty of Dental Surgery (Eng) has recently updated the guidance in an attempt to reflect some of these changes. The aim of these updated guidelines is not to produce a definitive list of those patients who should have routine access to dental implants within the NHS. The objective is to provide a framework to facilitate informed discussion between providers and commissioners both locally and nationally to identify those groups of individuals who should have routine and automatic access to funding for dental implants.

The outcome may vary from region to region based on the demands of the population and local services. The aim, however, is to provide consistent and speedy access to care for these agreed groups by negating the need for case-by-case authorisation where this currently exists.

RECOMMENDATIONS FOR DELIVERY

A clinical lead for implant provision should be appointed to oversee case acceptance, clinical provision and maintenance of the patient pathway. Routine cases can be planned and delivered within a restorative dentistry setting whereas those of greater complexity may require further input. These cases may require a multidisciplinary

approach within an established implant team to ensure prosthetically driven and planned implant placement. Individuals that are likely to be part of the team include specialists in oral surgery, dental and maxillofacial radiology, oral and maxillofacial surgery and orthodontics depending on the type and requirements of the case.

The funding for implants on the NHS is likely to be a precious resource. As such, team meetings on the provision of implants may also be required to ensure a team approach to decision making. The decision to provide implants needs to be balanced against the alternative modes of restoration, their ease of provision, longevity and outcome rates.

As research associated with implant provision is emerging the continued professional development of the whole team needs to be ensured. This can take the form of study clubs, seminars and journal review to maintain an evidence-based approach to patient treatment.

Establishment of locally agreed protocols for long-term maintenance that may take place in primary or secondary care is advised. The provision of replacement restorations and ongoing periodontal maintenance can also be provided in primary care.

PATIENT ASSESSMENT

Patients undergoing treatment should be free from systematic diseases that may prevent completion of both surgical and restorative phases of care. Smoking may preclude patients from provision due to significant risks of failure. Dental health needs to be optimal and patients with signs of parafunction need to be

assessed with caution. Where bone volume is compromised for implant placement consideration for adjunctive procedures such as bone grafting may be considered. In complex cases the need for 3D imaging in conjunction with computer aided planning software maybe required.

Once the decision is taken to provide an implant-based restoration a comprehensive consent process outlining all potential benefits and complications should take place.

CLINICAL INDICATIONS

People with congenital conditions resulting in deformed and/or missing teeth

Hypodontia/oligodontia/anodontia

This category ranges from young patients with one or two developmentally missing anterior teeth to those who have very few permanent teeth.

Cleft palate

Repaired clefts with sufficient bone are often amenable to implant placement. Unrepaired clefts and those requiring bone grafts are more complex and are likely to require a multidisciplinary approach.

Ectopic teeth

Patients presenting with ectopic teeth that have failed to respond to conventional orthodontic/surgical approaches should be considered for implant provision for replacement of the ectopic tooth or teeth rendered unrestorable due to collateral damage.

Congenitally malformed teeth and supporting structures

Patients presenting with structural defects in dentine and enamel or with congenitally complex root canal anatomy

making conventional root canal treatment difficult should be considered for implant rehabilitation.

People who have lost teeth due to trauma

Loss of one or more anterior teeth in cases where the alveolar bone is mostly intact can be readily treated. Patients who have suffered major bone loss in addition to multiple teeth through trauma may require bone grafts. It is in the best interest of the patient that the dentition is carefully assessed initially as late presenting pathology (such as undiagnosed loss of vitality) could complicate the implant provision pathway.

People who have undergone ablative surgery for head and neck cancer

The size of the defect can vary but this does not equate to larger defects being a higher priority for implant provision. The non-implant retained prosthesis should be considered and ideally provided before deciding upon the need for additional support and retention provided by implants. An unsuccessful outcome may have a greater impact in this very difficult treatment group.

People who are edentulous in one or both jaws

The provision of two implants in the mandible to retain an overdenture is now widely recognised as the first choice treatment in the completely edentate.¹ The provision of this type of prosthesis has been shown to improve oral health related quality of life, function, satisfaction and is considered a cost effective approach when compared to conventional dentures.²

Those patients presenting with an intact and stable dentition in one arch opposing an edentate arch can also be considered for

implants especially if they fall into one of the other categories detailed in this document.

People with severe denture intolerance

Patients with severe denture intolerance due to gagging, patients with severe ridge resorption resulting in unacceptable stability or pain, or those with psychological aversion to dentures may be considered for implant therapy.

People with aggressive periodontitis

Patients presenting with either localised or generalised aggressive periodontal disease in the absence of secondary modifying factors (such as smoking) can be considered once disease has been stabilised and where there is a requirement for tooth replacement.

People with malocclusions requiring implant-borne anchorage

Temporary anchorage devices and conventional implants may provide significant anchorage sources for orthodontic treatment.

CONCLUSION

In summary, implants can provide a significant health improvement for many patients but the risks and benefits must be fully understood by patient and clinician alike. The patients' expectations must be realistic and where indicated patient care should be planned in an appropriately trained multidisciplinary team. Appropriate consultations, records and correspondence should aid in achieving an optimal patient outcome.

1. Thomason J M, Feine J, Exley C *et al*. Mandibular two implant-supported overdentures as the first choice standard of care for edentulous patients--the York Consensus Statement. *Br Dent J* 2009; **207**: 185-186.
2. Awad M A, Lund J P, Shapiro S H *et al*. Oral health status and treatment satisfaction with mandibular implant overdentures and conventional dentures: a randomized clinical trial in a senior population. *Int J Prosthodont* 2003; **16**: 390-396.