

# Dental Implant Treatment for Patients with Psychiatric Disorders

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**Abstract** - *The literature with respect to whether or not psychiatric disorders represent a contraindication to dental implant treatment is sparse and contradictory. This paper describes three cases in which patients with psychiatric disorders were provided with dental implant retained prostheses. It is concluded that mental health disorders are not necessarily a contraindication to dental implant treatment and dental implant treatment can provide valuable psychological support. If any doubt exists about the effect of a psychiatric disorder on the prognosis of implant treatment the opinion of a psychiatrist should be obtained. The development of liaison psychiatry for dental hospitals should be seen as an ideal.*

KEY WORDS: Dental implants. Psychiatric disorders.

## INTRODUCTION

The development of osseointegrated dental implant treatment has given the dentist an ability to establish greater retention, stability and support for dental prostheses. Improvements in bite force and chewing efficiency have been demonstrated with the use of implants<sup>1,2</sup>. The use of dental implants can also provide an option for a patient to have a fixed prosthesis when otherwise a removable denture would have to be worn.

There are few absolute contraindications to dental implant treatment and these include uncontrolled diabetes, local pathology and some blood dyscrasias. There are a number of relative contraindications such as smoking, systemic haematological disorders, radiation therapy and osteoporosis<sup>3,4</sup>. The literature is not clear as to whether or not psychiatric disorders represent a contraindication to dental implant treatment.

Guidelines to assist clinical providers and Health Authorities in the assessment of patients for the consideration of dental implants within the NHS were published by the Royal College of Surgeons of England<sup>5</sup>. This document stated that implant treatment is usually contraindicated in subjects with 'severe psychoses/neuroses'. It also suggested that patients with a psychological aversion to dentures are difficult to assess and that such patients should be assessed by a psychologist or psychiatrist. The document stated that it was important to differentiate patients with an aversion to dentures from those with severe psychiatric problems for whom implants are contraindicated.

Butterworth *et al*<sup>6</sup> undertook a survey of the provision of dental implants in the National Health Service Hospital Dental Service. Almost 80% of consultants providing implant treatment felt that psychoses were a contraindication

to dental implant treatment. Tanner<sup>3</sup> reviewed treatment planning for dental implants and included a history of mental disorders, which may give rise to totally unrealistic expectations as an absolute contraindication. Sugerman and Barber<sup>4</sup> also reviewed criteria for patient selection for dental implants and included psychiatric disease in the contraindications. They stated however that many of the contraindications they listed were relative and that dental implants might be considered after further patient evaluation and risk assessment. In the early years of osseointegrated implant treatment, a wide range of psychiatric disorders were considered by Swedish implant teams to be absolute contraindications for dental treatment. However, Swedish teams have subsequently treated patients with psychotic syndromes, who have managed well with good co-operation, with medication and continued psychiatric/psychological support<sup>7</sup>.

This paper describes three cases of patients with psychological disorders who had been referred for specialist prosthetic treatment and who were provided with dental implant retained prostheses. The management of these patients and the general implications for implant treatment of patients with psychiatric disorders are discussed.

## Case I

Ms HB, a 50 year old housewife was referred by her general dental practitioner because of her inability to wear a recently constructed lower complete denture. She had been edentulous for 17 years. Five previous dentures had been constructed, but none had been successful. She found it difficult to eat and felt embarrassed in company. She had been recently divorced and was concerned about the effects of the loose lower denture on a new relationship.

Her medical history included depression and anxiety of approximately 17 years duration for which she was taking anti-depressant medication. She also suffered from hypothyroidism and was taking thyroxine.

On examination the mandibular alveolar ridge was grossly

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resorbed. The fit of the mandibular complete denture was satisfactory and it was well extended. The denture was however unretentive and unstable. The upper complete denture was satisfactory. Clinical and radiographic evaluation indicated that the placement of implants in the anterior mandible was feasible. The nature of implant treatment was described and discussed with the patient and she was keen to be considered for implant treatment. In view of the medical history, the patient was referred to a liaison psychiatrist for assessment and recommendations for management before further discussion.

The psychiatric assessment recorded that she had a long history of mental illness with chronic depression and somatic symptoms of abdominal and neck and shoulder pain. Her condition was worse when she felt under pressure. The opinion of the psychiatrist was that the provision of dental implants might improve her psychological well-being though he cautioned that her tendency to somatisation may cause her to focus on problems relating to the face and mouth following the implant treatment. Predicting how likely this was to happen was not possible.

This opinion was discussed with Mrs. HB as well as other available treatment options and she indicated that she wished to proceed. Ms HB was treated with two mandibular implants and gold bar to retain and support a lower complete denture. She has worn this successfully for six years and feels much more confident in social situations and is able to eat much better.

### Case 2

Mrs. MM was a 52-year-old social worker referred by her general dental practitioner. She complained of looseness of her maxillary complete denture. On examination, the denture was considered to be under-extended and ill-fitting. A new complete denture was constructed. Although this denture met the patient's aesthetic requirements and was retentive and stable she complained that she could not tolerate the denture. She also stated that she had a "psychological barrier" to dentures and that she felt frustrated and that she frequently had this problem in her mind.

The patient's medical history included allergy to penicillin and depression for which she was taking anti-depressant medication. Before assessment for implant treatment the patient was referred for a psychiatric opinion. The psychiatrist's report revealed that the patient had low self-esteem that was made worse when she was forced to consider having dentures. The thought of having dentures had made her feel very miserable but she believed that once she got them she would get used to them and that these thoughts would pass. She said that dentures made her feel horrible however and were a threat to her physical appearance. Further, the loss of her teeth and the wearing of dentures was a reflection that for the first time "death was on the agenda". She felt in despair and very distressed by the whole situation. The opinion of the psychiatrist was that the patient had a specific phobia. She also presented with depression and obsessional personality traits. It was concluded that this patient should do very well with implants if technically feasible.

Clinical and radiographic examinations revealed that the patient was suitable for five maxillary implants to support a fixed bridge prosthesis. Surgery was completed; all five

fixtures integrated and were used to support a fixed bridge. The patient was very satisfied with the outcome and felt much better about herself very soon after. Ms ML has been reviewed regularly for seven years, reporting great satisfaction with the outcome at each appointment.

### Case 3

Mr. RL was a 65-year-old retired teacher. He complained of an inability to wear dentures because of a pronounced retching reflex. The problem began many years previously when he had volunteered as a young man for the RAF. As part of the entry process he underwent a course of dental treatment that included a number of extractions. He described it as a horrific experience he said he 'would never forget it'. Since that time he had suffered from eczema and throat symptoms that were considered to have a psychological component. Over the years he progressively had more teeth extracted. Partial dentures were made but he could never tolerate any, including those with a reduced extension.

On examination he was edentulous in the maxilla and had only one premolar in the mandible. He underwent a psychiatric evaluation by a liaison psychiatrist. It was considered that he suffered from a mixed anxiety-depressive disorder with obsessional personality traits. The retching was considered to be due to an acquired phobia of objects in the mouth. Further clinical and radiographic evaluation confirmed that he was suitable for implant treatment and he was provided with four implants in the maxilla and a reduced extension maxillary denture supported and retained by clips and a bar.

He rapidly adapted to the denture and was extremely pleased with the outcome. It is interesting to note that he was subsequently offered and refused a lower implant retained prosthesis. He was particularly reluctant to consider a fixed prosthesis since he felt that he would be unable to remove it from the mouth.

Mr RL was reviewed regularly for ten years and was then lost to follow-up.

## DISCUSSION

The advice and information in the dental literature regarding dental implant treatment for patients with psychiatric disorders is sparse and contradictory. When considering contraindications to implant treatment, psychiatric disorders are sometimes have been described in terms of being severe or mild, which is to some extent unhelpful. In fact psychiatric illness encompasses a wide spectrum of heterogeneous disorders and with appropriate care many psychiatric disorders have a favourable prognosis.

Several psychiatric disorders such as anxiety and mood disorders are extremely common and, therefore, is inevitable that dentists will see partially dentate or edentulous patients with these disorders who need replacement of missing teeth. Dentists however are generally ill informed about the nature of psychiatric disorders.

Nowadays, even patients with severe mental health disorders can respond well to treatment and therefore a psychiatric disorder *per se* is not a contraindication to provision of implants. However, without a psychiatric opinion,

dentists may not be in a position to decide if a patient should be considered unsuitable for implant treatment and may be unfairly discriminatory. Further, the increase in self-esteem and improved quality of life obtained by a well fitting, well-retained prosthesis may provide valuable psychological support.

The three cases described here illustrate part of the spectrum of psychiatric disorders. Case 1 received conditional support for treatment from the psychiatrist but who warned of the risk that treatment might cause additional symptoms. Case 2 was badly affected by the loss of teeth and this was exacerbating symptoms of anxiety and depression. Case 3 was an example of a specific phobia and dental implants enabled the provision of a retentive, stable, reduced extension denture that fulfilled the patient's needs. It is of interest that he rejected the suggestion of a fixed lower bridge because he would be unable to tolerate something fixed in the mouth. These three cases confirm that implant-retained prostheses can be provided successfully for patients with psychiatric disorders. This is not surprising as studies have demonstrated the benefit that implant treatment can have on quality of life and psychological well-being.

There are clearly some patients for whom implant treatment will be contraindicated. It is essential that patients fully understand the proposed implant treatment including the requirements for maintenance and do not have unrealistic expectations. Patients who lack insight or are actively psychotic would therefore not be suitable. If there is any doubt about suitability it is imperative to obtain the opinion of a psychiatrist, though it should be noted that many doctors, including some psychiatrists are not well informed about the nature of dental implant treatment. The dentist must ensure that the physician understands all the treatment implications from surgery to the need for good oral hygiene and maintenance. Closer liaison of dentists with clinical psychologists and psychiatrists can produce more effective treatment and reduce long-term morbidity. The availability of liaison psychiatry for dental hospitals may be seen as an ideal <sup>8,9</sup>.

## CONCLUSION

Psychiatric disorders are not necessarily a contraindication to dental implant treatment.

On occasions dental implant treatment can provide valuable psychological support.

If any doubt exists about the effect of a psychiatric disorder on the prognosis of implant treatment the opinion of a psychiatrist should be obtained. The development of liaison psychiatry for dental hospital should be seen as an ideal.

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