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Seeking beauty: understanding the psychology behind orthognathic surgery

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Abstract

Orthognathic surgery to correct serious skeletal discrepancies of the jaw improves both function and appearance, but patients should spend a lot of time thinking about, discussing, and planning operations that have such a considerable impact. The drive to improve appearance by such radical means is based on social and personal reasons, and this must be understood before treatment is considered. In this paper, we will review studies on the psychology of orthognathic surgery.

Keywords: Orthognathic; Psychology; Psychosocial; Appearance

Introduction

Maxwell Maltz wrote, "When you change a man's face you almost invariably change his future. Change his physical image and nearly always you change the man."[1]

Within any population there are people whose facial morphology differs from others to such an extent that they feel bad about themselves and seek treatment to feel more accepted. Some have malocclusions that cannot be treated by orthodontic means alone.[2] In patients with severe skeletal discrepancies, orthodontic camouflage treatment cannot correct the relation between the top and bottom incisors or alter their appearance,[3] but orthognathic surgery can help when it is incorporated into an orthodontic treatment plan.[2]

What is orthognathic surgery and why do we do it?

Orthognathic surgery is the collective term for corrective operations that are done to reposition the upper, lower, or both jaws, to provide a functional and aesthetic appearance. It is a lengthy process but patients are usually highly motivated to make changes to improve their quality of life. Treatment involves teamwork between different disciplines and must encompass not only the clinical aspects of the treatment, but also the psychological welfare of the patient. Communication between the orthodontist, the surgeon, and potentially, a clinical psychologist, is therefore of paramount importance.[4] Orthognathic surgery is a serious elective procedure that involves years of treatment and acute physical discomfort, and patients might find it difficult to get used to their appearance.[5]

Operations are usually done when patients have stopped growing to prevent the result being altered by further growth, and because of this, orthodontic treatment, which aims to place the teeth in the ideal position for the operation, must be done first. It is important to inform the patient that this phase may initially worsen their appearance.[6]

What causes patients to seek treatment and what is the concept of beauty?

An unpleasing appearance can motivate someone to seek treatment.[7] Albino et al estimated that 80% of patients seek

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professional help more out of a concern for aesthetics than for health or function.[8] What is considered beautiful or socially desirable in one culture at one time may be totally unacceptable in another at the same or a different time.[7] Idealised pictures in the media and the advent of enhanced photographic images have progressively narrowed the range of what is seen as aesthetic.[7] The appearance of teeth and the smile are critical components of facial attractiveness, and models, actors, and musicians have teeth that are perfectly aligned, bleached, and of ideal proportions. These popular images can generate self-criticism and dissatisfaction, particularly among adolescents and young adults,[9] and these pressures are made worse by a society that reacts in a prejudiced manner to their appearance.[7] We equate beauty with a number of positive traits and this has led us to develop a preference for an attractive partner. Orthognathic operations permit these ideals to be achieved more rapidly, predictably, and permanently.[7,10] Basic human desires to find a partner and conform to society entail the adoption of the values of that society.[11]

Physical appearance dramatically affects all areas of human life from education to dealings with the law, and social interactions.[11] Research shows that in social interactions the listener's attention is directed mainly towards the mouth and eyes of the speaker.[9] The doctrine of "what is beautiful is good" is imposed upon us from early childhood, so much so that medicine and dentistry have become part of the cosmetic industry.[11] Attractive people are more likely to behave more confidently than less attractive people because of their better experience of social interaction.[11] Attractive people are more likely to be popular, are expected to be more intelligent and more persuasive, and are also more likely to have job opportunities and to be treated more generously in a court of law. It seems unjust and immoral to accept that the more physically attractive one is, the more he or she is liked, since physical appearance is genetic and not a measure of character. However, we live in a climate that rates physical attractiveness highly, so self-image and social interactions are often affected as a result.[11] A person who seeks orthognathic surgery is not looking for any one of these things specifically, but human nature will drive them to find these things subconsciously because they are "good".

The general concept of quality of life originated in general medicine and has been defined as "People's perception of their position in life in the context of the culture and value systems in which they live and in relation to their goals, expectations, standards and concerns", or more simply as "A sense of well-being that stems from satisfaction or dissatisfaction with areas of life that are important". The more specific concept of "oral health-related quality of life" has been defined as "a standard of health of oral and related issues which enables an individual to eat, speak and socialise without active disease, discomfort or embarrassment", or "the absence of negative impacts of oral conditions on social life and a positive sense of dento-facial self-confidence". Researchers in New Zealand assessed the association between oral health-related quality of life and the severity of malocclusion among 430 children aged between 12 and 13, and found that children in the "handicapping" category of malocclusion obtained the lowest scores, and those in the "minor/no malocclusion" category scored the highest. However, these differences emerged only in the areas of emotional and social well-being (for example, being teased, avoiding smiling) and not in oral symptoms or limitations of function (for example, pain, difficulty in chewing).[9,12] Bell et al found that patients who chose to have an operation thought that they deviated from the ideal, whereas those who did not, perceived themselves to be closer to it.[13] Skeletal dysgnathia has an unfavourable impact on some patients' personal and social lives, so we offer orthognathic surgery to people with dento-facial abnormalities to improve their quality of life.[7]

Who, psychologically, is suitable for orthognathic surgery?

Patients who have orthognathic treatment generally experience functional and psychosocial benefits after operation, and an aesthetic improvement has the greatest influence on quality of life.[7,8,10,14] However, psychosocial well-being should not depend solely on the correction of a facial deformity. It is the responsibility of the orthodontist and surgeon to give advice about facial dysgnathia. This requires careful counselling before treatment, to fully inform patients of the prognosis, anticipated results, suspected time frame, risks, and advantages and disadvantages of various options. Patients can then judge whether the perceived psychosocial benefits warrant the time, pain, and inconvenience involved.[8,11]

Success depends largely on the appropriate selection of patients. To the surgeon, a successful result may include improved oral function, low morbidity, lack of complications, and long-term stability. Several studies have shown that the more common complications such as paraesthesia of the inferior dental nerve and infection, are low.[15,16] A national 9-year review of mandibular orthognathic surgery in the NHS found that patients stayed in hospital for around 3 days, and this continues to become shorter.[17] However, to the patient, the concept of success can be very different. Improved quality of life and psychological health are outcomes that neither the surgeon nor the orthodontist can measure, and that the patient may not be able to explain. It is essential that the surgeon and all those involved understand that in some instances, the psychosocial benefit to the patient of an improved appearance may be the primary or only measure of success, and no amount of clinical success will matter if this is not the case.[1,10,18] The psychological problems of these patients are social in nature and their appearance is a component of their social identity.[19] Good preoperative psychological analysis and referral may be necessary.

Care should be taken when offering an operation to people who relate their facial deformity to all life experiences, or who assume that it will solve their problems.[8,11] Women