

The Concept of Orthodontic Treatment For The Adult

A. Vojdani, D.D.S., H. Horgian, D.D.S.

Introduction

The concept of orthodontic treatment for the adult is not a new one, in fact, such treatment has been practised for many years, though only rarely until comparatively recently, as few orthodontists were willing to attempt it. Many orthodontists and most patients were under the impression that orthodontic could only be carried out during the years of rapid growth and physical development, that is, before the age of about sixteen years. It is, of course, true that from both physical and psychological viewpoints, this is the ideal time for treatment to be carried out but, as has now been proved⁶, successful results can be obtained in most cases, and in almost all, given the co-operation of the patient, a worthwhile improvement can be achieved.

As Reitan³ in his paper of 1966 has stated, 'A continuous movement of teeth whose supporting tissues, prior to treatment, are in a resting period will not cause the same reaction as in young individuals, 'However, he then goes on to describe how, as a conclusion his observations of

Associate professor and Head of Orthodontic Department,
Teheran University, School of dentistry.
Associate professor and Head of Pedodontic Department,
Teheran University, School of Dentistry.

experimental treatment of adults, 'There is an extensive increase in the cellular elements on the pressure side of the periodontal membrane which is favourable to tooth movement.' He cautions though that an excess of pressure will, in some cases, cause a cell-free hyalinized area in the periodontal tissues preventing tooth movement. Seide⁴ in 1964 and Huggins and Lovius² in 1966 have also published their results from treating adult orthodontic patients.

Discussion

We would like to consider the various reasons adults give for seeking orthodontic treatment and our experiences in selecting from these those cases which are most likely to have a favourable outcome. As we have gained the majority of our experience in Iran our observation can be said to have been made in reference patients although we think that they would probably have been the same if made elsewhere.

Orthodontics was almost unknown in this country until fairly recently but most types of malocclusion are now being treated in both public universities and in private offices. At the present time orthodontic treatment, when indicated, is regarded by most patients in urban areas as a necessity. It can be seen that this relatively sudden introduction of orthodontic treatment here has led to a situation in which many patients who, when young, had no opportunity of being treated, seeing what is being done for their children, are now demanding the same type of treatment for themselves. So, as orthodontic therapy becomes more and more in demand we are being faced with an ever-increasing number of adults seeking our advice and treatment.

The success of any orthodontic treatment is very dependant on the determination of the patient to be treated. We⁶ have found this to be especially applicable to adult patients. The mature patient presenting for treatment should , in addition to the usual physical assessment of his condition as to the possibilities of a successful result from treatment, also be carefully examined from the psychological viewpoint to assess the type of motivation he has for being treated.

In our present century, perhaps more than ever before, great importance is placed upon physical appearance. This must be due in part to the fact that cosmetic surgery, of which orthodontics may be considered a part , has been developed to such an extent that if a person so wishes he can change the shape of his nose, face, body and mouth and teeth. He can even apparently reverse the ageing by appropriate surgery and the skillful repositioning and replacement of his teeth. At the moment there is no doubt that many people feel, usually with good reason , that a good appearance has a great influence on many parts of their lives. So one group of patients approaching the orthodontist is that which would like to present what is generally considered to be an ideal dental appearance. Nor will they have made their decision to seek orthodontic help merely out of a desire to improve their appearance for the better; they will also have been influenced by years of feeling different and perhaps inferior to others . As Atkinson¹ remarks when speaking of the time for orthodontic treatment, 'Mental suffering is as harmful as the physical handicap, perhaps more so.' He goes on to illustrate his point with the radiograph of, 'The skull of one of those neglected, unfortunate persons at the age of 30-35 years. Even

in the prime of life, the bones of the face reflect years of not only physical trouble but of mental anguish and an ever-present, pitiful sense of inferiority.

We have been able to help a substantial number of patients of this type 6. In selecting them treatment we have found they have considered their action in seeking orthodontic aid in a reasonable manner and very strongly motivated to accept and to co-operate in whatever treatment the orthodontist suggest.

In a completely different category is a second group of patients who ostensibly consult the orthodontist for the same reasons as the above group, but who are in fact suffering from some kind of psychiatric disorder. Unlike those patients seeking treatment for genuine cosmetic reasons, they see an often very small fault in their appearance as bring all-important to success, or more often the lack of it, in their lives. We have found this type of patient to be very unco-operative, and even if a satisfactory result is achieved they remain unsatisfied and his or her anxiety is transferred to another point at fault which is again seen as a major obstacle to a successful life. As has been noted by Tulley and Cryer⁵ in their book, 'Orthodontic treatment for the adult.', 'From time to time adult patients will present with acute anxiety states and with a fixation concerning a very mild dental irregularity. They will be very difficult patients and a successful outcome of the orthodontic treatment will be followed by a transference of their fixations. It may be in the patients best interests to obtain a medical opinion before undertaking any treatment.' We have found this observation helpful when selecting adult patients for treatment. We regard it as extremely important to distin-

guish between these two apparently similar groups of patients: treatment of the first group is likely to be successful while in our opinion the second group will be better served by being referred for psychiatric help.

A third group of adults presenting for orthodontic treatment is that with purely physical disorders, the most frequent of which are those causing pain in the temporomandibular joint and various gingival and periodontal conditions. These patients are usually referred to the orthodontist by other specialists who have often attempted to deal with the problem by other methods and have come to the conclusion that correction of their malocclusions by orthodontic means may have some beneficial effect. In some cases this may be effective but we have found that a patient, who had thought that He could be treated relatively simple, will decide that an often long period of orthodontic therapy would be completely unacceptable. Indeed he will find it difficult to believe that the wearing of an orthodontic appliance for a lengthy period could possibly have a beneficial effect on his condition. Many patients in this group with whom we have started treatment have been very unco-operative and have often asked to be referred back to their original doctor to seek a quicker alternative solution to their problems. Even the patient who, perhaps, needs more space in his mouth for a more satisfactory restoration of his teeth does not usually like to undergo a preliminary period of orthodontic therapy - he merely wants his teeth to be replaced as soon as possible. Such patients can, however, with skillful management and close co-operation between dentists, be persuaded to accept minor orthodontic treatment with very satisfactory results. Again

experience and an accurate assessment of the patient's character and motivation are very important before embarking on a course of orthodontic treatment. This view is also supported by Tulley and Cryer⁵ who say, 'Despite the fact that it is possible to carry out most orthodontic procedures on the young adult, the results will be disappointing unless there is full co-operation.' They are also of the opinion that considerable experience is required in order to judge cases which will have a successful outcome.

It can be seen that there are many contra-indications to orthodontic treatment of the adult. Patients must be carefully selected, especially with regard to their motivation for seeking orthodontic help as, in our opinion, this motivation is the most important factor governing the successful outcome of any treatment. It must, of course, also be dependant on the physical condition of the patient and on the condition of his teeth and their supporting tissues. The patient's social and working life may also preclude the wearing of orthodontic appliances and their nature should be very fully explained to him before any commitment to treatment is made. We have also found that some adult patients feel considerably more discomfort during orthodontic procedures than do children and for this reason they may be tempted to abandon treatment even if they are otherwise ideal patients.

Conclusion

Altogether we have treated about a hundred cases of different types of malocclusion, some of them severe, in adults⁶. Each case was selected after a thorough examination of the patient's physical condition. The patient's motive for wanting to be treated was investigated and every aspect

of the proposed treatment was explained to him as fully as possible.

We have come to the conclusion that, with careful selection of patients, adult orthodontic treatment is a very reasonable and that its practice is to be encouraged. We have made use of simplified procedures whenever possible and our aim has been to produce a reasonable occlusion and an improved appearance rather than trying for a complete correction of the malocclusion as we do for the child patient.

Summary

Through our experience gained with adult patients during the last ten years we have found it useful to divide them into three groups: -

1- Those who are very strongly motivated to accept orthodontic treatment for cosmetic purposes and with whom treatment will usually be satisfactory.

2- Those who are suffering from anxiety states and who have developed a fixation on a dental fault and with whom it is very unwise to begin treatment before a favourable psychiatric report is obtained.

3- Those patients who need treatment before prosthetic rehabilitation or for other physical disorders and in whom treatment may or may not be successful, depending on the degree of co-operation shown by the patient and on good teamwork between dental specialists.

References

- 1- ATKINSON, Spencer R. (1967),
Time for Orthodontic Treatment,

-
- American Journal of Orthodontics*,
53, 49 - 54.
- 2- HUGGINS, D.J. and LOVIUS, B.B.J. (1966),
Orthodontic Treatment for Adult Patients,
The Dental Practitioner,
16, 315 - 323.
- 3- REITAN, K. (1966),
Tissue Reactions following Orthodontic Tooth Movement,
Current Orthodontic edited by D.G. WALTHER,
Bristol, John Wright and Sons Ltd.,
457 - 487.
- 4- SEIDE, Leonard J. (1964),
Adult orthodontics,
American Journal of Orthodontics,
51, 342 - 352.
- 5- TULLEY, W.J. and CRYER, B.S. (1969),
Orthodontic Treatment for the Adult,
Bristol, John Wright and Sons Ltd.,
1, 3 - 4.
- 6- VOJDANI, A. and BORGIAN, H. (1976),
*A Practical approach to orthodontic treatment for the adult
patient*,
Israel Journal of Dental Medicine,
25, 35 - 39.