

BSRD POSTER PRIZE WINNER 2008

CASE REPORT

THE USE OF AN IMPLANT RETAINED BRIDGE FOR ANCHORAGE IN THE CORRECTION OF A SEVERE UNILATERAL CROSSBITE: A CLINICAL TECHNIQUE AND LABORATORY PROCEDURE

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Studies have shown that the prevalence of unilateral posterior cross-bite in the early to mixed dentition varies between 8% and 23%¹⁻⁵. Unilateral crossbite is characterized by an arch deficiency, and possible asymmetries in the upper or lower arch⁶. Early treatment has been recommended because spontaneous correction is unusual and management in the adult dentition can be more complex particularly where the anomaly is severe.^{7, 8} Treatment may be made even more complicated in adults due to tooth loss and the presence of a heavily restored dentition. Management in such circumstances invariably involves surgery and protracted orthodontics since satisfactory anchorage for tooth movement cannot be adequately achieved.

To overcome anchorage problems the use of both temporary and definitive implants in the area where tooth movement needs to be achieved has been described.⁹

This poster describes a case of an adult patient with a marked posterior cross bite on the right and free end saddle in the maxillary left quadrant. Since surgery was declined anchorage to correct the cross bite was achieved by utilising an implant retained bridge in the contra lateral side. The expansion of the upper arch was provided by a hybrid quad helix appliance which was bonded in the conventional way on the right hand side. However a customized connector was constructed to join the quad to the implant bridge.

The multidisciplinary management of patients requiring both Restorative and Orthodontic input has become an integral aspect of specialist units in district general hospitals in the UK. This case illustrates how the management of a patient requiring an advanced orthodontic procedure in the adult dentition was achieved as a result of the restoration of a free end saddle space on the contra-lateral side.

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