

Molar-Incisor Periodontitis Stage IV Grade C with pathologic tooth movement and its managment Bayliss-Chapman J, Wellmann C, Chatzopoulou D.

Clinical Case

A 29 year old, fit and well, non-smoking female was referred to our clinic in April 2018 by her dentist regarding the pathologic tooth movement of the UR2. On examination she had localised periodontitis on the UR2 and UR6. She was diagnosed with localised aggressive periodontitis (Molar-Incisor Periodontitis Stage IV Grade C). It was discussed at an early stage whether it was best to extract this tooth to prevent further bone loss and consider implant placement. She was keen to try and keep the tooth and was aware of the risk of tooth loss even with periodontal therapy. She received two courses of non-surgical periodontal therapy, the second course with adjunctive systemic antibiotics (400mg metronidazole tds 7 days, 500mg amoxicillin tds for 7 days) (Zandbergen 2016, Griffiths 2011).

At reassessment pockets had reduced to 5mm at both the UR6 and UR2 with no bleeding on probing. The UR2 was vital and the patient was deemed periodontally stable. The treatment options available to her were:

maintain the tooth with a splint (as it was Grade 2 Mobile)
orthodontic therapy to re-align UR2 followed by permanent orthodontic retention.
extraction of the UR2 and provision of resin-boned bridge or implant

After discussion of the potential risks and benefits the patient decided that she would like to proceed with orthodontic therapy. She commenced orthodontic treatment privately and attended regularly for periodontal maintenance (6 weekly). Her oral hygiene was excellent throughout. After orthodontic therapy she was given fixed retainers and continued to attend the clinic for supportive periodontal therapy.





CONCLUSIONS

This case demonstrated that teeth with advanced attachment loss and over-eruption can be successfully treated periodontically and good aesthetic outcomes can be achieved with careful orthodontic re-alignment in conjunction with intensive and meticulous periodontal maintenance. The patient was followed up after completing orthodontic therapy with no increase in probing depths compared with the pre-orthodontic levels. There was no residual pocketing >5mm and no bleeding on probing. Studies have shown that orthodontic treatment in periodontitis patients can have good long term outcomes with good periodontal maintenance (Carvalho 2018, Aimetti 2020, Zasčiurinskienė 2018). The patient was aware that orthodontic treatment would not correct the gingival margin discrepancy around the UR2, however, this has remained stable compared with pre-orthodontic levels. A resin bonded bridge may be a suitable treatment alternative, with good long-term success rates (Thoma 2017), however, it would have been difficult to achieve and preserve soft tissue contour and interdental papillae to the same level. Resin bonded bridgework still remains an option for the future.

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