

Editorial

The Great Divide

I have recently returned from examining candidates for one of the UK specialty examinations in orthodontics and I have had the chance to reflect on the performance of the candidates.

Most orthodontists would probably agree that one of the most important aspects that a specialty examination assesses, is the candidates' diagnostic and treatment planning abilities. One factor that separates the candidates into those tending to have a thorough case assessment and a logical, justifiable treatment plan from those whose plan was devised following a quick 'eyeball' of the case, is the use of a formal space analysis.

It appears that the most popular method is the Royal London Hospital Space Analysis. This is a formal method of assessing all aspects of the malocclusion that has an implication on the space requirement. Features of the malocclusion that use space, such as relief of crowding, reduction of overjet, flattening of the curve of Spee, and angulation/inclination changes are considered in order, and a sum is made of all items in this list to give a specific figure for space required. The RLH analysis has a cross check of the figures, as, in the absence of any tooth size/number discrepancy, any difference in space requirement between the upper and lower arch must be reflected in the molar relationship. Thus a 7mm greater space requirement in the upper arch will be manifest as a unilateral Class 2 molar relationship or a bilateral half-unit class two relationship. This knowledge allows the candidate to check the figures contained within their analysis, and identify over or underestimates of any particular aspect, if a discrepancy is identified.

Secondly, space creation techniques such as extraction of teeth and tooth reduction are considered alongside

techniques that may require more space, such as tooth build-up or space opening for prosthetic replacement.

This system appears to benefit treatment planning as it allows the operator to obtain an objective assessment, of how much space they require for full treatment of the malocclusion. This should logically lead to the correct decision on: (i) whether to extract teeth, (ii) which teeth to extract, (iii) whether headgear or other forms of anchorage supplementation are required, if class 2 elastics will be necessary and exactly how far the upper and lower molar teeth need to move to produce an optimal result. Whilst it is, of course, possible to reach the same conclusions using the 'eyeballing' method, it is infinitely more difficult for the aspiring orthodontist to argue his/her case clinging to slightly nebulous concepts and imprecise value judgements.

We owe it to all our trainees to give them the skills and tools to comfortably pass the specialty examinations at the end of their training. I would strongly encourage all trainers and trainees to take some time to study the RLH space analysis and to consider using it on their cases for a few months. Once familiar with all aspects of the space analysis it will prove difficult, if not impossible, to resist using it when working up cases for presentation and discussion.

In the meantime, many confident candidates fully armed with the information they need for a full and thorough diagnosis and subsequent treatment plan will continue to contrast starkly with those presenting their treatment plans following a quick 'eyeball' of the case.

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