Pre-orthodontic options for 21st-century parents

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As a matter of routine, when accepting an orthodontic treatment plan, parents are required to acknowledge the risk that their children’s teeth could be damaged during treatment. At best, unless they commit to permanent use of a retainer, patients can expect almost definite relapse and worst-case scenarios may include enamel damage, root resorption or in the case of corrective jaw surgery, painful lifelong complications.

Unfortunately, though, while parents are becoming more aware of the risks and limitations of traditional orthodontics and the generating impetus toward more stable, less invasive treatments, they are often not being informed of all the alternative options that are available.

Despite this increased recognition of the shortcomings of traditional orthodontic treatments and the escalating demand for contemporary options, the causes of malocclusion remain somewhat hidden from parents. In order to make an informed decision regarding their children’s oral health and to decide which treatment is the most suitable, these causes of malocclusion must be highlighted.

Three in four 21st-century children will experience malocclusion and parents, as well as the dental professionals advising them, have traditionally attributed this to hereditary factors. However, research shows that rather than genetic, the aetiology of malocclusion is predominantly environmental.

The most recent evidence, which is often not presented to parents during orthodontic consultations, reveals that the majority of malocclusions are caused by incorrect myofunctional habits. Therefore, relapse is often not presented to parents during orthodontic consultations, reveals that the majority of malocclusions are caused by incorrect jaw development.

This incorrect development restricts the space that is available for erupting teeth and prevents them from growing into their ideal natural position. For the best part of the last century, the easiest fix for this problem has been to extract healthy permanent teeth, then to use braces to align the remaining teeth into undeveloped jaws.

Unfortunately, for countless orthodontic patients, these mechanical treatments are focused on the symptoms of malocclusion, but fail to address the underlying causes of the condition, which is why relapse is the most predictable outcome.

An increasing number of dental professionals have accepted the necessity for new treatment methods that would address the causes, rather than just correcting the symptoms, of malocclusion.

These practitioners recognise that in addition to environmental factors (such as the modern diet) inhibited jaw development is being caused by poor myofunctional habits, including thumb sucking, reverse swallowing and mouth breathing.

Once these myofunctional causes of malocclusion have been identified, the potential for natural growth is unlocked and myofunctional treatment methods, which can produce more stable results without relying on heavy mechanical forces, become possible. Additionally, these preventive, pre-orthodontic treatments can be undertaken and completed much sooner than, or even in conjunction with, braces if necessary.

In fact, combining pre-orthodontic preventive treatment with less invasive orthodontic techniques can produce outcomes far superior to those achieved using a single treatment philosophy.

As a result of improved awareness regarding their children’s oral health care, 21st-century parents have become increasingly enthusiastic about less invasive, more preventive treatment methods. Legally these parents should be presented with all the treatment options that are available.

Although patient compliance with functional appliances and myofunctional therapy techniques has historically restricted the widespread acceptance of these treatments, modern techniques have addressed these concerns. There are now treatment systems that package myofunctional habit correction, arch expansion and dental alignment into one integrated system.

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