Early orthodontic treatment and oral health-related quality of life

Relationship confirmed by University of Sheffield’s School of Clinical Dentistry study

By DTI

SHEFFIELD, UK: In Western countries like the UK, between 10 and 20 per cent of adolescents undergo orthodontic measures in some form. A recent meta-analysis conducted by researchers at the University of Sheffield’s School of Clinical Dentistry has indicated that treatment in those younger years may have a measurable impact on a person’s oral health-related quality of life (OHRQoL).

In their review, they found that levels of emotional and social well-being concerning OHRQoL improved moderately in patients who were treated orthodontically before they were 18 years old. The findings are relevant, because, until now, there has been little evidence that treatment actually improves OHRQoL.

The researchers included data from over a dozen studies reporting outcomes before and after orthodontic treatment that were conducted within the last ten years in countries like Australia, Brazil, Canada, China, Italy, the UK and the US. Of these, four were finally selected for using similar questionnaires to measure what young people thought about their teeth and how their dental appearance affected their life, before and after orthodontic treatment. All showed measurable and moderately large improvement in the areas of emotional and social well-being, according to the researchers.

The study revealed first evidence that orthodontic treatment in early age improves oral health-related quality of life. (© Nina Buday/Shutterstock.com)

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As practicing orthodontists we are constantly being told by our patients that they are pleased they had their teeth straightened and that they are no longer embarrassed to smile or to be photographed,” explained co-author Prof. Philip Benson, who is also Director of Research at the British Orthodontic Society. “We wanted to find all the research that has tried to measure this effect with young people.”

While the findings are a first step to establishing a platform for exploring this issue further, Benson admitted that the number of participants included in the studies was small and that higher-quality data is needed to substantiate the conclusions. A follow-up study investigating OHRQoL in the under-18 age group under the supervision of co-author and student Hanieh Javidi as part of her doctoral research project is underway at the School of Clinical Dentistry.

The study, titled “Does orthodontic treatment before the age of 18 years improve oral health-related quality of life? A systematic review and meta-analysis,” was published in the April issue of the American Journal of Orthodontics and Dentofacial Orthopedics.