

Tricks of the trade

The Elliot separator for safe and efficient interproximal reduction

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Figure 1.

Judicious reduction of the interproximal enamel, termed interproximal reduction (IPR), is one means of creating the space necessary for relief of crowding. IPR requires directed removal of enamel without compromising the contact points, which must be re-established after the space created has been used. Of utmost importance during the process is ensuring that all the soft tissues are protected because there is potential to traumatize the lips or cheeks, the tongue, or the interdental papilla beneath the contact point.

The Elliot separator was conceived as a means of separating teeth for Class II restorations. In orthodontics, it enables gentle tooth separation and allows the interproximal area to be easily accessed. Its elegant design consists of a pair of spring-loaded blunt pincers, a body, and a screw mechanism (Figure 1). This separator can be used to excellent effect when performing IPR, because it not only effectively separates the teeth, but, most importantly, keeps tissues away, and therefore directly protects the vulnerable soft tissues including the

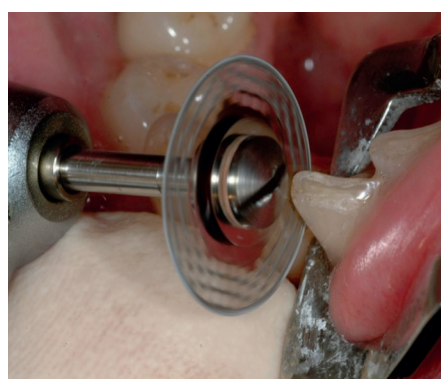


Figure 2.

lips, tongue and interdental papillae (Figure 2).

The clinician places the instrument at the contact point and turns the screw until the pincers engage the interproximal space. The patient is then asked to carry out further turns themselves, until there is a clear air gap between adjacent teeth (Figure 3). Allowing the patient to control the pressure means that separation continues until discomfort is felt, which reassures anxious patients. The



Figure 3.

teeth need only be separated by the minimal distance required to allow the chosen IPR instrument to pass between without friction.

A single Elliott separator can be used in all quadrants as the screw of the separator can be undone, the pincers removed from the body of the instrument, rotated 180 degrees, then re-inserted (Figure 1).

The Elliot separator makes a valuable addition to the orthodontist's armamentarium, and allows efficient, effective and, most importantly, safe interproximal reduction of enamel.

Naeem I Adam, BDS (Hons), PgCert MedEd, MSc, MOrth, FDS (Orth), Post-CCST in Orthodontics, Leeds Dental Institute/Chesterfield Royal Hospital/St Luke's Hospital, Bradford. **Jonathan Sandler**, BDS(Hons), MSc, PhD, MOrthRCS, FDSRCPs, Professor and Consultant in Orthodontics, Orthodontic Department, Chesterfield Royal Hospital. email: naeem.adam@nhs.net

Compliance with Ethical Standards

Conflict of Interest: The authors declare that they have no conflict of interest. **Informed Consent:** Informed consent was obtained from all individual participants included in the article.