



3 steps to achieve a minimally invasive extraction.

STEP 1.

Use of the **Periotome** or **X-Otome** to sever the PDL prior to performing an extraction.

The Periotome has thin flexible blades that can be used by placing the instrument into the gingival sulcus and moved in an apical direction 360° around the tooth to sever the periodontal ligament (PDL). The X-Otome is quickly becoming more popular as it is more durable and easier to control compared with the periotome. The X-Otome is a hybrid, a cross between the periotome and a root elevator, that efficiently executes the severing of the PDL by rocking it slightly 2-3 degrees around the tooth structure. In addition to severing the periodontal fibers, the narrow tips preserve tissue structures and eliminate bone fracturing. The custom sure grip handle has a thumb rest for even power transfer of hand pressure. (Fig. 1)



STEP 2.

Use of the **D-Lux elevators** to apply slow and steady luxation forces around the crown or exposed root. Keep in mind the D Lux elevators are meant to be inserted vertically and used apically. It is advised to avoid the buccal/labial aspect of the tooth as this may result in unwanted alveolar bone fracture. (Fig. 2)



STEP 3.

Use of the **X-Trac** or **Plus Series forceps** to apply slow and steady rotational forces clockwise and then counterclockwise until apical facial and lingual/palatal forces are applied. This rotation should be repeated several times until you feel slight mobility. The tooth will generally release towards the facial and the sequence is the same regardless of whether the tooth is single or multi-rooted or the crown is missing or fractured. X-Trac and Plus Series forceps are instrumental when performing a minimally invasive extraction due to their unique beak designs that allow the forceps to slide further below the gum line to engage both the crown and the root at the same time. Additionally the serrations allow for greater grip and control when rotational forces are being applied. (Fig 3)

