Physics Forceps Deliver Quantum Leap

In my thirty four years of dentistry, I have been privileged to witness an explosion of new ideas, new products, and a diversified armamentarium that allows us to deliver better dental care to our patients. Surgical techniques, growth factors, and bone grafting materials in periodontology have allowed us to retain healthy teeth that would previously have been sacrificed. In the setting of a lost tooth, the field of implantology has exploded with options to replace and restore a fixed dentition. The interface between these two massively expanding fields is conventional exodontia. Here, only subtle changes in forceps and elevator designs have appeared on the dental horizon in the last several decades. For most dentists, it represents one of our least favorite procedures and a procedure that can often be unpredictable in terms of time requirements. Even with subtle improvements in elevators and forceps, we are still faced with conventional techniques of torque, compression, rotation and the sometimes complication of broken teeth and the need to chase root tips.

This all changed for me three years ago when I was introduced to the Physics Forceps from Golden|Misch. This is the revolutionary new concept in exodontia that materially changed the ease and predictability of extractions. The extractions using the Physics Forceps are more predictable in time commitment, faster procedures, and most assuredly, less traumatic physically and psychologically to the patient...."

The key issue is the biomechanical design. The biomechanical rationale of the Physics Forceps is that the instruments act like a simple first class lever. One force is applied with the beak of the forceps on the lingual aspect of the root. The second force is applied via a “bumper,” which is placed buccally in the vestibule as low as possible in the mandible and as high as possible in the maxilla. The handles of the Physics Forceps are not squeezed but just held with firm pressure. A gentle but steady rotational force is applied through a small amount of wrist movement only. (About 3-40 of rotational force) For the patient it almost feels as if it is a passive motion. Time stands still for that brief period of time but as the periodontal ligament disengages, the tooth will literally “pop.” After that releasing pop, the tooth is easily delivered with a conventional instrument.

The constant, unrelenting pressure to the PDL by the Physics Forceps is substantially more efficient at “releasing” the tooth compared to the intermittent and alternating forces of conventional extraction technique. The simple first class lever multiplies the impact and speeds the process. This is what makes the Physics Forceps more efficient, faster and less traumatic to the alveolar bone. While it seems to be a simple concept, the Physics Forceps have become my go-to instruments for atraumatically extracting teeth. I have met many dentists who are as delighted as I am with the ease of use, patient comfort and superior outcome with the Physics Forceps. These instruments are a quantum leap forward in my exodontia armamentarium.

Dr. Fazio is currently Associate Clinical Professor of Surgery at Yale University School of Medicine. He is co-author of Oral Medicine Secrets and author of the textbook Principles and Practice of Oral Medicine. A 1971 graduate of Harvard College and a 1975 graduate of Harvard School of Dental Medicine, he also completed Clinical Fellowships in Periodontology and Oral Medicine at Harvard.