

Product Review

Innovation from Industry: The Relign Tricera 3-in-1 System

Randall Ehrlich, MD^a

Keywords: acl, sad, shaver, arthroscopy, sports medicine

<https://doi.org/10.60118/001c.14381>

Journal of Orthopaedic Experience & Innovation

Vol. 1, Issue 2, 2020

The 3-in-1 SHAVER provides effective soft tissue resection, ablation/coagulation, and bone cutting in one device, which has never been accomplished in the history of arthroscopic surgery.



Randall Ehrlich, MD

THE RELIGN 3-IN-1 SHAVER

EXPLAINED AND DEMONSTRATED BY RANDALL
EHRlich, MD

What is the name of innovation?

The RELIGN Tricera System and 3-in-1 SHAVER.

How long have you used it?

Approximately one month.

What types of cases is it used for?

Shoulder Arthroscopy (e.g., Rotator Cuff Repair, Labral Repair, Acromioplasty, Bursectomy, etc.)

Knee Arthroscopy (e.g., Partial Meniscectomy, ACL Reconstruction, etc.).



The complete Relign System

You were using something for this before, why did you switch?

I was using three different devices – a mechanized shaver, mechanized high speed burr, and a radiofrequency device.

What specific advantages does this product have?

Using the 3-in-1 SHAVER allows the surgeon to perform all necessary tasks in general shoulder arthroscopy with one single tool and without multiple instrument exchanges. The surgeon can resect and ablate soft tissue, remove bone and immediately coag a bleeder. With the 3-in-1 SHAVER, the surgeon can remain in the joint while maintaining accurate arthroscopic triangulation and avoid the need to repeatedly triangulate during a procedure.

What exactly makes it so innovative?

^a Randall V. Ehrlich, MD, is a board-certified orthopedic surgeon (bone and joint doctor) specializing in sports medicine, arthroscopic knee surgery and reconstruction of the shoulder and knee. He received his undergraduate degree at Cornell University and attended medical school at Columbia University College of Physicians and Surgeons. He completed his orthopedic surgery residency at Columbia-Presbyterian Medical Center and followed this with a fellowship in sports medicine and arthroscopy at NYU/The Hospital for Joint Diseases.

In addition to practicing medicine, Dr. Ehrlich is an instrument-rated pilot and an avid competitor in multi-sport events. He has finished six New York City Marathons as well as over 60 triathlons, including the Ironman.

[Conflicts of Interest Statement for this author](#)

[Visit the Open Payments Data Page for this author](#)



Use of the 3-in-1 Shaver in ACL Surgery

URL: <https://www.youtube.com/embed/bAU9ielgJIE>

The 3-in-1 SHAVER provides effective soft tissue resection, ablation/coagulation, and bone cutting in one device, which has never been accomplished in the history of arthroscopic surgery. Multiple features such as on demand coag, flush, suction control and switching modes can be controlled and navigated using either the handpiece, the footswitch, or the Tricera controller. This gives the surgeon extraordinary versatility and control of the surgical environment.

What does it “save” for you in the OR? For example- time saver? Easier to complete a task?

The 3-in-1 SHAVER saves time and is easier to use than conventional devices which require me to exchange multiple instruments throughout a procedure. There is no need to repeatedly triangulate during a procedure. Changing modes and on demand coag and flush feature is as easy as a press of the button.

Do you think this has impact on patient outcomes?

Using the 3-in-1 SHAVER does save precious procedure time and reduces iatrogenic soft tissue trauma when using portals without cannulas and decreases intra-operative blood loss when bleeding is encountered.

If you know something about its cost- explain whether this innovation is cost effective or not?

The cost of this device is extremely competitive with the cost of the current combined products (shaver, burr, RF device) that are currently in use.

VIDEOS OF THE 3-IN-1 INNOVATION IN ACTION

RELIGN CORPORATION

RELIGN Corporation is a next generation resection company based in Silicon Valley that launched the Tricera System - the first ever system that combines tissue resection, bone cutting, ablation/coagulation, and fluid management into one. The Tricera System allows the surgeon to efficiently perform arthroscopic procedures using one single device. RELIGN has integrated our unique technology into all components of the system giving surgeons ultimate control over the surgical en-



Use of the 3-in-1 Shaver in Subacromial Decompression Surgery

URL: <https://www.youtube.com/embed/3LDZE4QovTE>

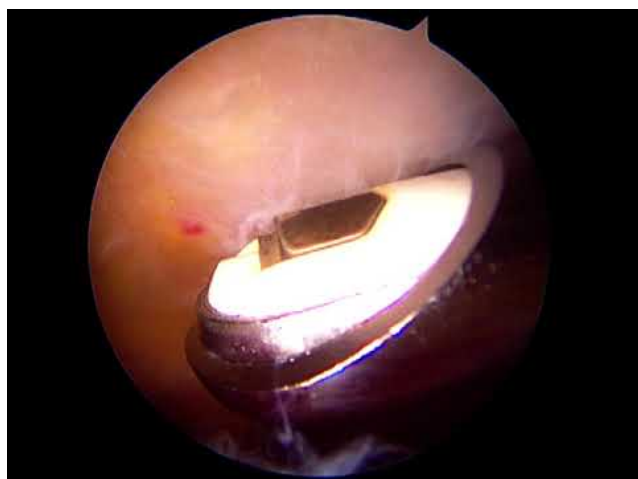


Transition from Shaver to Radiofrequency Coagulation

URL: <https://www.youtube.com/embed/Zot5EGDs7ew>

vironment. To learn more about RELIGN and the Tricera System, visit www.realigncorp.com.

PRODUCTS



Transitioning from Using the Shaver to Radiofrequency Ablation

URL: https://www.youtube.com/embed/jcQOY_XxxAg



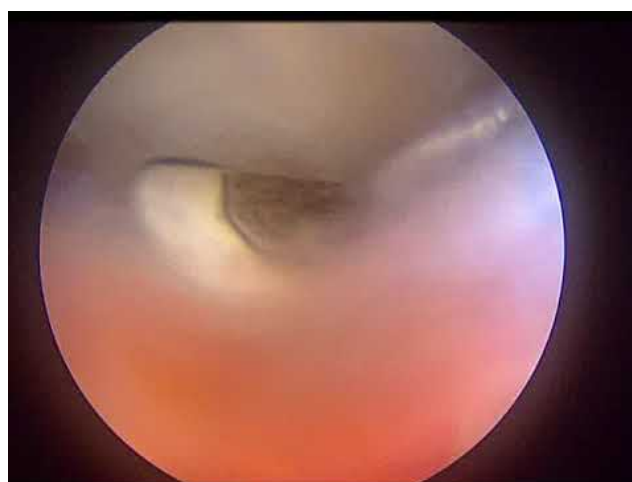
Use of the Shaver for Rotator Cuff Debridement

URL: <https://www.youtube.com/embed/YVVmbRa1eyI>



Decortication of the Humeral Tuberosity with the Bone Burring Function

URL: <https://www.youtube.com/embed/WFlp-kuBhe0>



Bursectomy with the Shaver Function

URL: <https://www.youtube.com/embed/CKXe2b0eA3k>



The Use of Radiofrequency Ablation in the Glenohumeral Joint

URL: <https://www.youtube.com/embed/1ZrO2ZKRYIs>



Use of the Shaver for a Bursectomy

URL: <https://www.youtube.com/embed/o3wovxQ39Tg>



Transitioning from the Shaver to Radiofrequency Ablation

URL: <https://www.youtube.com/embed/0iqH6pxfyCU>



Labral Debridement Using the Shaver Function

URL: <https://www.youtube.com/embed/BJq7TTWejY>

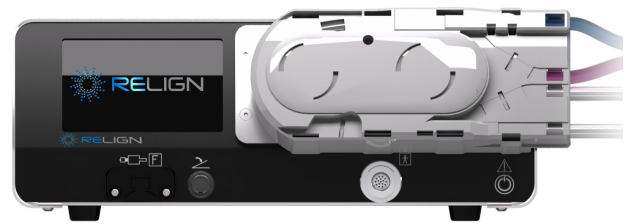


Transitioning from Shaver Function to Radiofrequency Ablation

URL: <https://www.youtube.com/embed/8uM1YgSIWCQ>



3-in-1 Shaver



Controller



Handpiece



This is an open-access article distributed under the terms of the Creative Commons Attribution 4.0 International License (CCBY-NC-ND-4.0). View this license's legal deed at <https://creativecommons.org/licenses/by-nc-nd/4.0> and legal code at <https://creativecommons.org/licenses/by-nc-nd/4.0/legalcode> for more information.