

TOPAZ® XL MicroDebrider Technique Guide

For Treatment of the Rotator Cuff



By the inventors of Coblation® technology, TOPAZ is a specialized minimally invasive radiofrequency-based treatment for tendons.

Coblation technology provides a controlled, minimally invasive approach for soft tissue debridement.

The **TOPAZ XL MicroDebrider** enables the debridement of soft tissue present within the rotator cuff tendon. The device utilizes bipolar plasma-mediated technology, for creating small, shallow impressions. TOPAZ XL addresses the rotator cuff in a way that conventional arthroscopic subacromial decompression alone cannot. Add a biological approach to treating the rotator cuff tendon.



RECOMMENDED DEVICES: Quantum Coblation System and TOPAZ XL MicroDebrider



Materials Needed

- ArthroCare Quantum™2 Coblation System, optional Foot Control *or*
- ArthroCare Quantum™ Coblation System, optional Foot Control *or*
- ArthroCare Atlas® Coblation System with Foot Control and Timer
- TOPAZ XL MicroDebrider *or* TOPAZ XL MicroDebrider with Integrated Finger Switch (IFS)

The TOPAZ Advantage

- Easily administered procedure
- Designed to specifically treat tendons

ArthroCare Quantum Coblation System Setup

- Step 1** Connect power cord to Controller and outlet.
- Step 2** Connect Foot Control to Controller if using TOPAZ XL MicroDebrider, non-integrated finger switch format. Foot Control connection is not required when using TOPAZ XL MicroDebrider in Integrated Finger Switch format.
- Step 3** Connect TOPAZ XL MicroDebrider to Controller. The Controller will automatically default to a recommended set point of 5.

ArthroCare Atlas Coblation System Setup

- Step 1** Connect power cord to Controller and outlet.
- Step 2** Connect Timer to Controller.
- Step 3** Connect Foot Control to Timer.
- Step 4** Connect TOPAZ XL MicroDebrider to Controller. The Controller will automatically default to a recommended set point of 5.

Patient Selection Guidelines

- Patients with full thickness rotator cuff tears, acute trauma, neurogenic disease, ligamentous disruption, or bone and joint abnormalities are not considered appropriate candidates for TOPAZ.
- Although biomechanical studies in cadaver tendons have not shown TOPAZ to weaken tendons, it is unknown whether or not patients with partial tendon tears may be at increased risk for tendon rupture after treatment.

Patient Preparation

- Place patient in appropriate position. For lateral decubitus position, traction of approximately 7 to 10 lbs is applied to the forearm and the shoulder in neutral flexion with 40° to 70° abduction. For beach chair position, no traction is applied to the forearm. Patient is prepped and draped in sterile fashion.

TOPAZ XL Procedure

- Step 1** Glenohumeral arthroscopy should be performed in standard fashion to evaluate concurrent pathology and the undersurface of the rotator cuff.
- Step 2** After glenohumeral arthroscopy is complete, the instruments must be repositioned in the subacromial space.
- Step 3** A lateral portal is created just anterior to the mid-point of the acromium and some 3–4cm lateral to the bony edge to allow passage of a 7mm cannula into the subacromial space parallel to the acromial undersurface.
- Step 4** The arthroscope is introduced through the posterior portal, just beneath the acromial undersurface. An anterior portal and cannula may also be used to facilitate outflow and instrumentation. Instruments are delivered via the lateral portal into the subacromial space.
- Step 5** The supraspinatus tendon is exposed. If bursal resection is necessary for visualization of the tendon, a partial bursectomy is performed as necessary to expose the tendon. Both the Quantum Coblation and Atlas Coblation Systems will automatically default to set point 5 when the TOPAZ XL MicroDebrider is connected.
- Step 6** Introduce TOPAZ XL MicroDebrider through the lateral portal to access the bursal surface of the rotator cuff (*Figure A*). The Quantum Coblation System integrated timer and Timer required for use with the Atlas Coblation System provide a pre-determined 0.5 second treatment interval to produce small punctures in the tendon tissue (*Figure B*). A series of small punctures approximately 5–8mm apart, are created on and around symptomatic tendon area. Most commonly, the affected tendon receives 12–15 punctures, depending on the tendon size.
- Step 7** The wound is irrigated with copious amounts of normal saline once the symptomatic area is treated.
- Step 8** The wound is closed by using appropriate standard suture techniques.
- Step 9** A local anesthetic is administered and standard sterile dressings applied.

Post Operative Care and Rehabilitation

Early and aggressive rehabilitation is well tolerated. Basic science research has demonstrated that biomechanical function is not adversely affected in the acute phase following microdebridement using the TOPAZ device.

The first week of post-operative therapy should center on pain management, while working to achieve full range of motion in all planes using active and active-assisted means.

A resistance program should begin early, within 3 weeks, once post operative pain has diminished and range of motion is restored.



Figure A

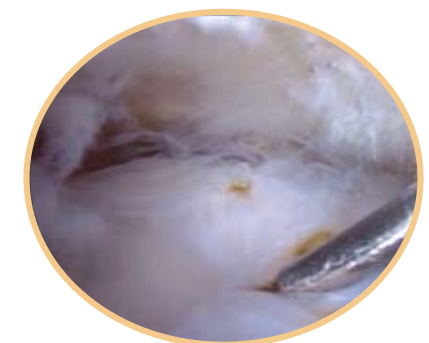


Figure B

For more information about the TOPAZ MicroDebrider, please visit www.topazinfo.com



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Ordering Information

	Part Number	Product Description
Wands	ACH4045-01	TOPAZ XL MicroDebrider with Integrated Finger Switch (IFS)
	AC4045-01	TOPAZ XL MicroDebrider
Controller Systems	H4000-01	Quantum Coblation System
	H4500-01	Quantum 2 Coblation System
	H4001-01	Wireless Foot Control and Receiver (optional use with Quantum)
	H3000-01	Atlas Coblation System
	H2000-21	ArthroCare Timer (required use with Atlas)

For more information about the TOPAZ MicroDebrider, please visit www.topazinfo.com, contact your local **ArthroCare Sports Medicine representative** or call **1-800-797-6520**.

CAUTION: Federal (USA) law restricts this device to sale by or on the order of a physician.
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