Surgical Oncology Technique Tips

Transcollation® Technology in Surgical Oncology Procedures Using the Aquamantys® 9.5 XL Bipolar Sealer

TARGET PROCEDURES

- Liver - hepatic resection
- Pancreas - distal pancreatectomy
- Kidney - partial nephrectomy

RECOMMENDED DEVICES

Aquamantys 9.5 XL
(Aquamantys 6.0, 2.3, and MBS may also be used if no blunt dissection is needed)

Note: For open procedures only. For laparoscopic procedures, refer to the monopolar technique guide.

TECHNIQUE

- Liver – score the liver capsule before treating
- Blunt dissection – position the 9.5 XL at a 90° angle; as the device is moved, the second tip follows the path of the first
- When the cone-shaped tips on the 9.5 XL are pushed into the tissue, it will penetrate ~1 mm deeper than the Aquamantys Malleable Bipolar Sealer (MBS) or 6.0 with similar treatment times
- Treating broad surface areas – press firmly and use a circular motion, maintaining constant contact
- Move slowly and work in a small area before moving on

For a listing of indications, contraindications, precautions, and warnings, please refer to the Instructions For Use (IFU) that accompany Aquamantys disposable devices or the Aquamantys System User Guide.

TREATMENT AREAS

<table>
<thead>
<tr>
<th>Application</th>
<th>Treatment area</th>
</tr>
</thead>
<tbody>
<tr>
<td>Liver</td>
<td>Resection plane and tumor bed</td>
</tr>
<tr>
<td>Pancreas</td>
<td>Resection plane and distal stump</td>
</tr>
<tr>
<td>Kidney</td>
<td>Resection plane and tumor bed</td>
</tr>
</tbody>
</table>

ENSURING PROPER PERFORMANCE

**Time**
Optimal treatment time is the minimum amount of time required to achieve hemostasis of the target tissue areas at the surgical site. It is determined by a combination of generator output power, saline flow, electrode-to-tissue contact pressure, and the movement speed of the handpiece electrodes across the tissue being treated.

**Temperature**
To maintain the appropriate temperature of 100°C, place the tip of a suction device adjacent to the working area to avoid pooling of blood and saline. Blood and saline pooling decreases the effectiveness of the technology.

**Recommended power settings**

<table>
<thead>
<tr>
<th>Application</th>
<th>Initial power</th>
<th>Flow</th>
</tr>
</thead>
<tbody>
<tr>
<td>Liver (hepatic resection)</td>
<td>170 W</td>
<td>Medium</td>
</tr>
<tr>
<td>Pancreas (distal pancreatectomy)</td>
<td>160 W</td>
<td>Medium</td>
</tr>
<tr>
<td>Kidney (partial nephrectomy)</td>
<td>140 W</td>
<td>Low</td>
</tr>
</tbody>
</table>

**Pressure**

- Ensure the device tips are in full contact with tissue prior to activating the technology
- Press firmly and use a circular or linear motion, maintaining constant contact with the tissue when treating broad areas
- Isolated soft tissue or bone bleeders can be spot treated
- Avoid dabbing to maintain effectiveness of the technology
Aquamantys® SURGICAL ONCOLOGY TECHNIQUE TIPS

Transcollation® Technology
Transcollation technology combines radiofrequency (RF) energy and saline for hemostatic sealing of soft tissue and bone at the surgical site. Vessels up to 1 mm may be occluded, reducing bleeding.

Aquamantys System
The Aquamantys System delivers Transcollation technology through a proprietary RF generator and a single-use disposable bipolar sealer.

9.5 XL Bipolar Sealer
Cone-shaped electrode design aids blunt dissection and hemostatic sealing

Ordering Information

<table>
<thead>
<tr>
<th>Description</th>
<th>Catalog Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aquamantys 9.5 XL Bipolar Sealer</td>
<td>23-313-1</td>
</tr>
<tr>
<td>Aquamantys Pump Generator</td>
<td>40-402-1</td>
</tr>
</tbody>
</table>

Caution: Federal Law (USA) restricts these devices to sale by or on the order of a physician. For a listing of indications, contraindications, precautions, and warnings, please refer to the Instructions For Use (IFU) that accompany Aquamantys disposable devices and/or the Aquamantys System User Guide.

For further information, please call 866-777-9400.
You may also consult our website:
www.medtronic.com/advancedenergy

Medtronic Advanced Energy, LLC
Medtronic USA, Inc.
180 International Drive
Portsmouth, NH 03801
USA
www.medtronic.com/advancedenergy
Tel: (866) 777-9400
Fax: (866) 222-0900