



Autotome™ RX
Jagtome™ RX
Hydratome™ RX
Dreamtome™ RX
Ultratome™ XL
MicroKnife™ XL
RX Needle Knife XL

Cannulating Sphincterotome

RX ONLY

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

REUSE WARNING

For single use only. Do not reuse, reprocess or resterilize. Reuse, reprocessing or resterilization may compromise the structural integrity of the device and/or lead to device failure which, in turn, may result in patient injury, illness or death. Reuse, reprocessing or resterilization may also create a risk of contamination of the device and/or cause patient infection or cross-infection, including, but not limited to, the transmission of infectious disease(s) from one patient to another. Contamination of the device may lead to injury, illness or death of the patient.

DEVICE DESCRIPTION

Contents

Each packaged pouch contains the following:

Each Autotome RX, Ultratome RX, MicroKnife XL and RX Needle Knife XL packaged pouch contains the following:

- One (1) Cannulating Sphincterotome.

Each Preloaded Autotome RX (Jagtome, Hydratome, and Dreamtome) packaged pouch contains the following:

- One (1) Cannulating Sphincterotome RX preloaded with guidewire.

Operating Principle

The Sphincterotome is a 200 cm catheter that tapers from 7F (2.3 mm) to 5.5F (1.8 mm) with an atraumatic tip.

The Sphincterotome is capable of accepting a guidewire, injecting contrast and cutting. The Sphincterotome may be placed with or without the aid of a guidewire. When connected to a monopolar current, the Sphincterotome may be used to incise the Papilla of Vater and/or the Sphincter of Oddi. The Sphincterotome is designed for use with endoscopes that have a working channel of 2.8 mm and larger. Color-coded, endoscopic visual markers are located on the distal tip to aid in the assessment of the catheter cannulation and insertion into the biliary system.

Catheter Shaft

The catheter shaft contains a lumen for the monofilament cutting wire, a guidewire channel and injection lumen to inject contrast medium by attaching a contrast filled syringe to the proximal luer.

Cutting Wire

The exposed monofilament cutting wire provides the necessary electrical continuity to facilitate proper controlled cutting of the sphincter and/or papilla. The Sphincterotome monofilament cutting wire is exposed with bowing of the distal tip by extending/retracting the handle. The MicroKnife XL and RX Needle Knife XL Sphincterotome monofilament cutting wire extends up to 7 mm beyond the distal tip by activating the handle.

Catheter Tip

The distal segment of the catheter has a curved distal profile. The distal tip of the catheter has a radiopaque distal marker that can be used to fluoroscopically monitor and/or confirm position.

RX Channel – For RX Sphincterotomes ONLY

The Guidewire Lumen on RX Sphincterotomes has an open channel that allows for rapid exchange of a guidewire.

Guidewire Compatibility

The Sphincterotomes are recommended to use the following Boston Scientific Pancreatic or Biliary Guidewire:

Product Tip Size	Recommended Guidewire
3.9F Sphincterotomes	Jagwire Guidewire 0.025 in (0.64 mm)
4.4F, 4.9F or larger Sphincterotomes	Jagwire Guidewire, Hydra Jagwire Guidewire and Dreamwire Guidewire 0.035 in (0.89 mm)

Note: Due to the various guidewire tolerances among manufacturers, only Boston Scientific Pancreatic or Biliary guidewires are recommended.

Warning: Only a recommended guidewires may be left in place during sphincterotomy. All other guidewires must be removed prior to energizing the cut wire to prevent injury to the patient.

Generator Compatibility

Boston Scientific Sphincterotomes adapt to a variety of monopolar generators using the appropriate Active Cord (sold separately). Below is the indication for the Active Cord configuration and generator compatibility:

Active Cord Order Number	Generator Compatibility
M00561250	Olympus™ Generator
M00561270	Bovie™, Valleylab™, Aspen Labs™, ERBE™ Generators, Endostat™, Endostat™ II and Endostat™ III Generators

Precaution: The Sphincterotome must be used in conjunction with a Type BF or CF generator.

Precaution: It is recommended that the operator not use the device with any generator setting which may output a voltage exceeding the Maximum Voltage Rating. Sphincterotome Maximum Voltage Rating: 750 V peak (1500 V peak-to-peak). Active accessories (such as Active Cord) should be selected that have an Accessory Voltage Rating equal to or greater than 750 V peak.

Precaution: The active length information provided is intended to be used with the guidance from the Electrosurgical Generator manufacturer to determine if the overall length of an Electrosurgical Accessory remains within the maximum allowable length. The overall active length of each Electrosurgical Accessory is the following:

- Autotome RX / Jagtome RX / Hydratome RX / Dreamtome RX - 225 cm
- Ultratome XL/MicroKnife XL - 232 cm
- RX Needle Knife XL - 229 cm

The overall active length includes the connector, cord handle and cutting wire. The length of other connecting cords must be considered when used with the Sphincterotome.

Materials



Contains cobalt: CAS No. 7440-48-4; EN No. 231-158-0. Defined as a 1B carcinogen and reproductive toxicant according to the European Commission in a concentration above 0.1 % weight by weight.

Note: The Delivery System is made with stainless steel which contains cobalt. Current scientific evidence supports that stainless steels used in medical devices, do not cause an increased risk of cancer or adverse reproductive effects.

User Information

The Sphincterotome should only be used by or under the supervision of physicians trained in endoscopic retrograde cholangiopancreatography (ERCP) or endoscopic sphincterotomy (ES). A thorough understanding of the technical principles, clinical applications and risks associated with ERCP/ES is necessary before using this device. This device is intended for use in an adult patient population.

Note: The safety and effectiveness of this device for use in a pediatric patient population has not been established.

INTENDED USE/INDICATIONS FOR USE

The Sphincterotome is indicated for use in the selective cannulation of the Common Bile Ducts (CBD) and the transendoscopic sphincterotomy of the Papilla of Vater and/or the Sphincter of Oddi. The Sphincterotome can also be used to inject contrast medium.

Clinical Benefit Statement

The clinical benefit of the Sphincterotome is it provides selective cannulation of the Common Bile Duct (CBD), enables contrast injection for fluoroscopic visualization of the biliary and pancreatic ducts, and performs sphincterotomy of the Papilla of Vater and/or the Sphincter of Oddi to facilitate therapeutic procedures during an ERCP procedure.

CONTRAINDICATIONS

Contraindications for this device are those specific to endoscopic retrograde cholangiopancreatography (ERCP) and endoscopic sphincterotomy (ES).

WARNINGS

Safe and effective electrosurgery is dependent not only on equipment design, but also, to a large extent, on factors under the control of the operator. It is important that the following be read, understood, and followed in order to enhance safety and effectiveness:

- The Sphincterotome is intended for single use. If reused, the material between the lumens may be compromised and may not be properly insulated for Sphincterotomy.
- Possible safety hazards may result from gas embolism caused by over-insufflation of air, inert gas prior to high frequency surgery, etc. Endogenous gases should be sucked away if possible prior to procedure. Failure to do so may result in patient injury.
- Patient leakage currents from endoscope, as well as energized Sphincterotome, are additive and may result in thermal/electrical injury. Consult the endoscope manufacturer about the proper grounding of the endoscope.
- Monopolar diathermy or electrosurgical cautery in patients with pacemakers or implantable cardiac defibrillators can result in electrical reset of the cardiac device, inappropriate sensing and/or therapy, tissue damage around the implanted electrodes, or permanent damage to the pulse generator. A cardiologist should be consulted prior to using Sphincterotome in these patients.
- Skin-to-skin contact should be avoided (for example between the patient's arms and body) by way of dry cloth or gauze in order to prevent possible thermal or electrical injury.
- Monitoring electrodes should be placed as far from the surgical area as possible. Failure to do so may result in injury or electrical shock to the patient or procedural room personnel.
- Needle monitoring electrodes are not recommended as they may cause patient injury such as burn.
- Avoid incidental contact between Active Cords and the patient's body, or any other electrodes to prevent electrosurgical harms such as burns, cardiac arrhythmias, fulguration, and stimulation.
- Flammable agents used for cleaning or disinfecting, or as solvents of adhesives, should be allowed to evaporate before the procedure. Failure to do so may result in a fire and/or electrical injury to the patient or user.
- It is suggested that the operator and the assistant wear protective gloves to prevent accidental burns. Universal precautions should be used in all cases.
- This device is not intended to be used in the presence of flammable liquid, in an oxygen enriched atmosphere or in the presence of explosive gases as this may lead to patient and/or user injury and may cause fire.
- Any electrosurgical device constitutes a potential electrical hazard to the patient and/or the operator.
- No modification of this equipment is allowed.
- Fluids or flammable agents that may pool under the patient or in body depressions or cavities may lead to injuries such as electric shock or burns or other patient injuries. Any fluids on the procedure room floor should be mopped prior to electrosurgery in order to avoid injury.
- Inappropriate use of the guidewire may result in damage to wire/tip, interfacing device and/or duct.

ADVERSE EFFECTS

Possible complications include, but may not be limited to:

- Allergic Reaction
- Cholangitis
- Hematoma
- Hemorrhage
- Pancreatitis
- Perforation
- Septicemia/Infection
- Stone Impaction
- Tissue Damage

Possible electrosurgical adverse effects include:

- Burns
- Cardiac Arrhythmias
- Fulguration
- Stimulation

HOW SUPPLIED

Device is supplied sterile using an ethylene oxide (EO) process. The packaging and device should be inspected prior to use.

Device Details

Do not use if package is damaged or unintentionally opened before use.

Do not use if labeling is incomplete or illegible.

Handling and Storage

This product has no special handling or storage requirements. Check device label for expiration date.

OPERATIONAL INSTRUCTIONS

Preparation

1. Remove the Sphincterotome from the package.

Note: For RX Preloaded devices ONLY – ensure that the pre-loaded guidewire portion stays in the guidewire lumen of the Sphincterotome.

2. Hold the distal tip and pull mandrel out of the Sphincterotome (be careful to keep precurved shape of tip).

Precaution: Avoid handle extension/retraction while it is in a coiled position. Kinking of the catheter shaft may occur, rendering the device inoperable.

3. Uncoil and inspect the Sphincterotome for proper cutting wire movement and for any damage, such as kinks.

Precaution: Kinks in the catheter will hinder injection capability. Do not use the Sphincterotome if any defect is found during inspection. Please notify Boston Scientific and return for replacement.

4. Attach the appropriate Boston Scientific Active Cord to themonopolar generator.
5. Attach neutral electrode.

Warning: Consult the neutral electrode manufacturer about the proper grounding of the patient. Ensure proper placement of the neutral electrode on the patient and the connection to the generator. Failure to do so may result in harm to the patient including burns. It is recommended that a monitoring neutral electrode be used, if a contact quality monitor is available, or built into the generator. The entire area of the neutral electrode should be attached reliably to the patient's body, and as close to the operating field as possible.

Warning: The patient should not come into contact with metal parts or objects that may be grounded to earth. Failure to do so may result in electrical/thermal injury.

6. Set the generator to the appropriate settings. Use the monopolar generator's recommended power settings for sphincterotomy.

Warning: Always follow the manufacturer's suggestions for the operation of the unit to prevent unnecessary hazard to the operator and/or the patient. Excess power may lead to patient injury or may damage the integrity of the cutting wire.

Warning: Prior to use, inspect guidewire for tip roughness, damage, and/or kinking. Do not use the guidewire if any defect is found during inspection to avoid potential patient injuries. Please return any defective product to Boston Scientific for replacement.

Precaution: Please review the operations and service manuals of the electrosurgical generator for proper settings and operation prior to using the Sphincterotome.

7. If the Sphincterotome is to be used with a recommended Boston Scientific Biliary or Pancreatic Guidewire (see Guidewire Compatibility section):

Precaution: Inspect the guidewire for roughness or abrasion at the tip.

- a. Insert the guidewire into the guidewire introducer at the proximal end of the Sphincterotome. While advancing the guidewire through the introducer, ensure that the movement is directed and aligned within the guidewire introducer.
 - b. Advance the guidewire beyond the distal end of the Sphincterotome and dip the distal tip of the guidewire (the non-stripped dark portion) in sterile water to activate the hydrophilic coating. This will make the coating lubricious for selective cannulation.
 - c. Then, retract the guidewire into the distal end of the Sphincterotome after activation of the hydrophilic coating.
 - d. For RX Sphincterotomes ONLY - It is recommended to use an RX Locking Device attached to the endoscope.
8. Flush the catheter with sterile water or saline to remove all air.
 9. The use of biopsy cap is recommended during Sphincterotomy.
 10. If contrast medium will be injected through the injection lumen, use a syringe < 20 cm³ (20 c) to inject the contrast and attach to the proximal luer.
 11. The Sphincterotome is now ready to use.

Precaution: Manually preforming the Sphincterotome may compromise the desired orientation of the cut wire.

Procedure

Precaution: Any use of this device, other than those indicated in these instructions, is not recommended.

Precaution: Prior to insertion and during advancing of the RX Needle Knife XL and MicroKnife™ XL Sphincterotome in the endoscope, ensure that the cutting wire is fully retracted.

1. Insert the Sphincterotome into the endoscope.

