

Minimally Invasive and Novel Therapeutics (M.I.N.T.) in Foregut Disease
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Cryotherapy of Barrett's Esophagus

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MGH



truFreeze Spray Cryotherapy System



Potential advantages of spray cryotherapy

- Freezing selectively targets cellular components vs matrix
 - Lower stricture rate?
 - Less perforation risk?
- Cardia can be treated in the retroflex position

Potential disadvantages of spray cryotherapy

- Requires decompression tube

Spray cryotherapy tips:

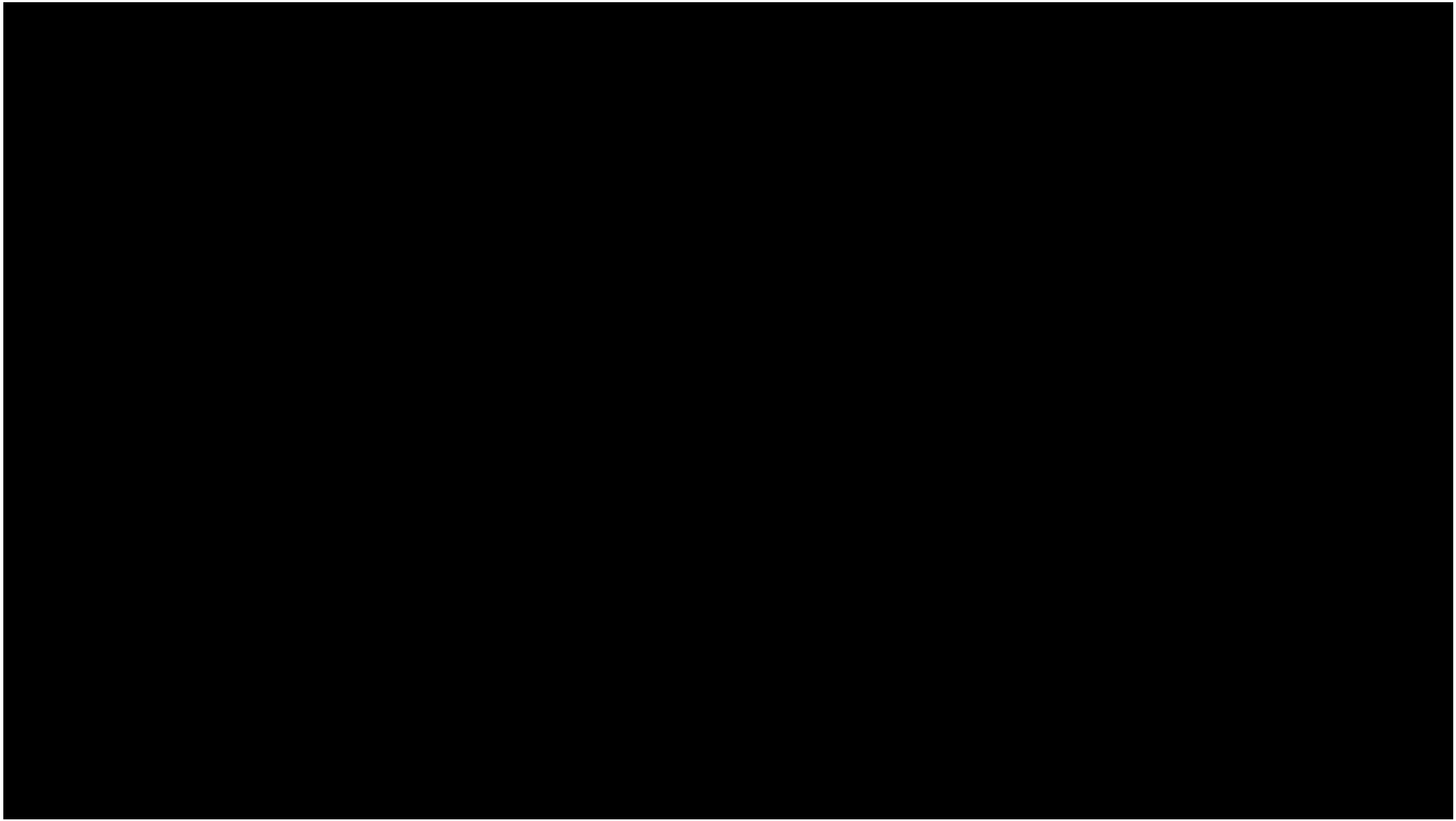
1. Decompression tube – 16 Fr, 20 Fr (LN₂ expansion ratio ~700)
2. Use a distal attachment (cap) – usually 12.4 mm
3. Mark the distance to the GEJ on the decompression tube
4. Use “defrost” mode while inserting spray catheter
5. Ensure staff is familiar with monitoring the abdomen during treatment (LN₂ expansion ratio ~700)



Spray cryotherapy “dosing”

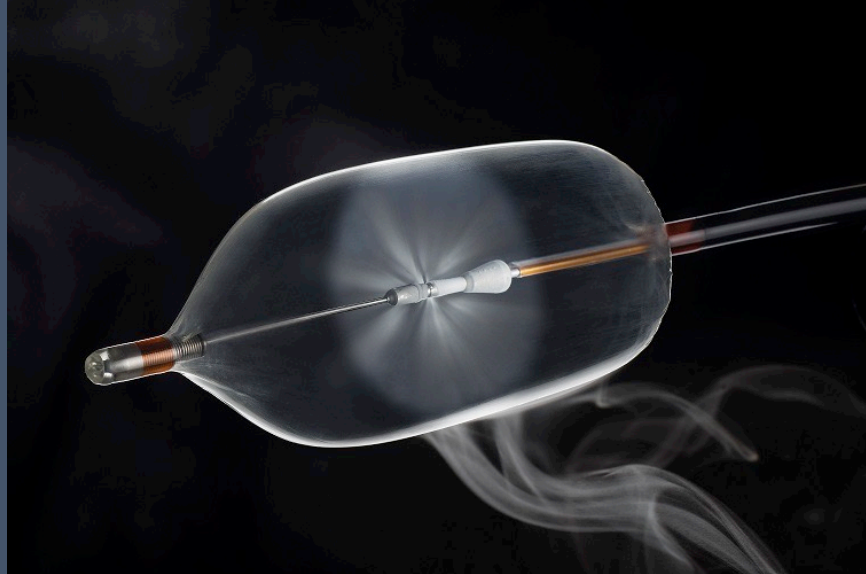
1. Typically freeze for 20 sec then “thaw” (typically ~45-60 sec)
2. Repeat freeze for 20 sec
3. A third freeze for 20 sec is often used for debulking procedures





C2 Cryoballoon catheter

- Balloon catheter based system (TTS)
- Nitrous oxide refrigerant



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