

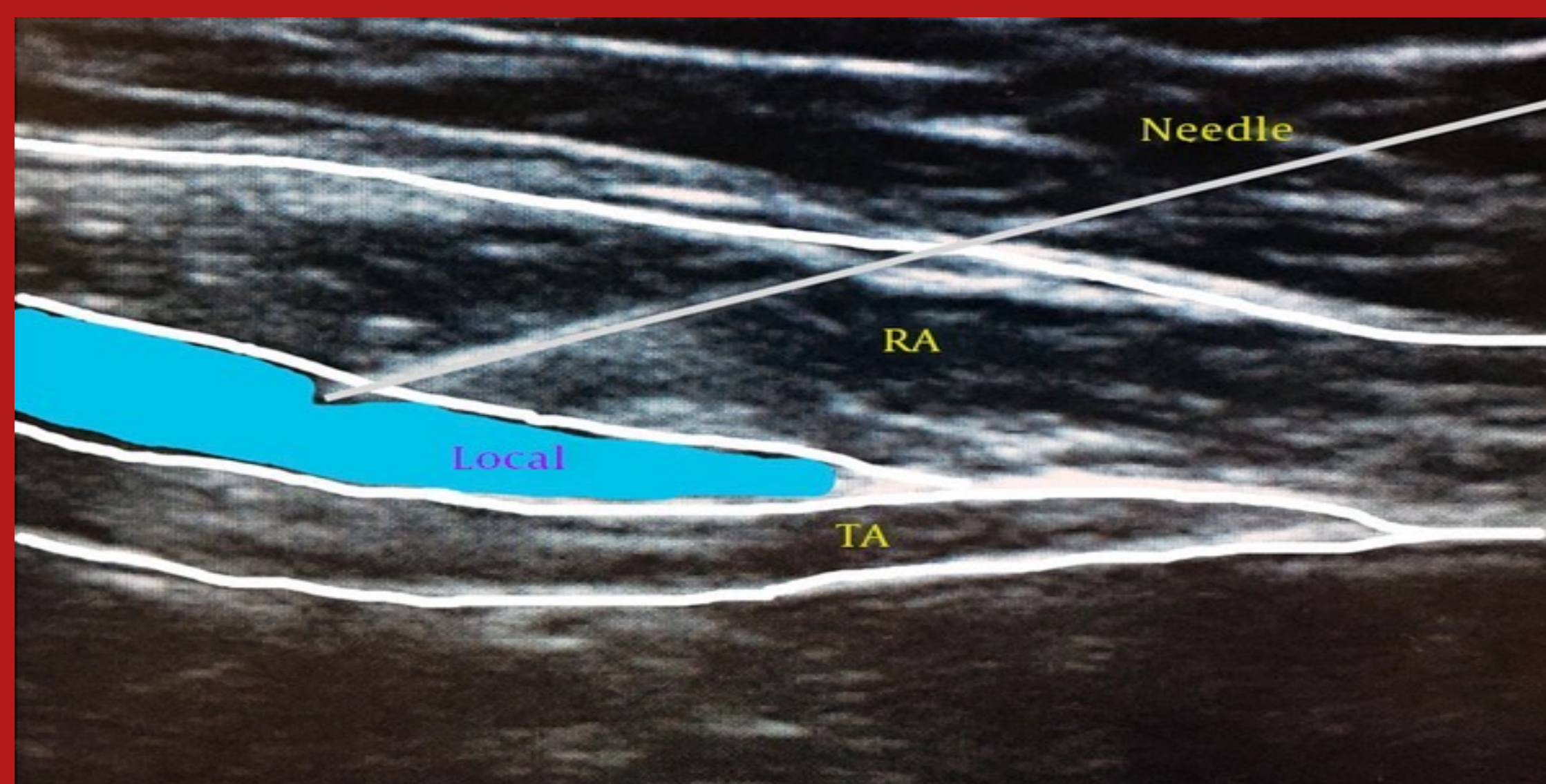
Subcostal Transverse Abdominal Plane (TAP) Catheters: A Novel Approach To Aid Extubation After Clamshell Thoracotomy

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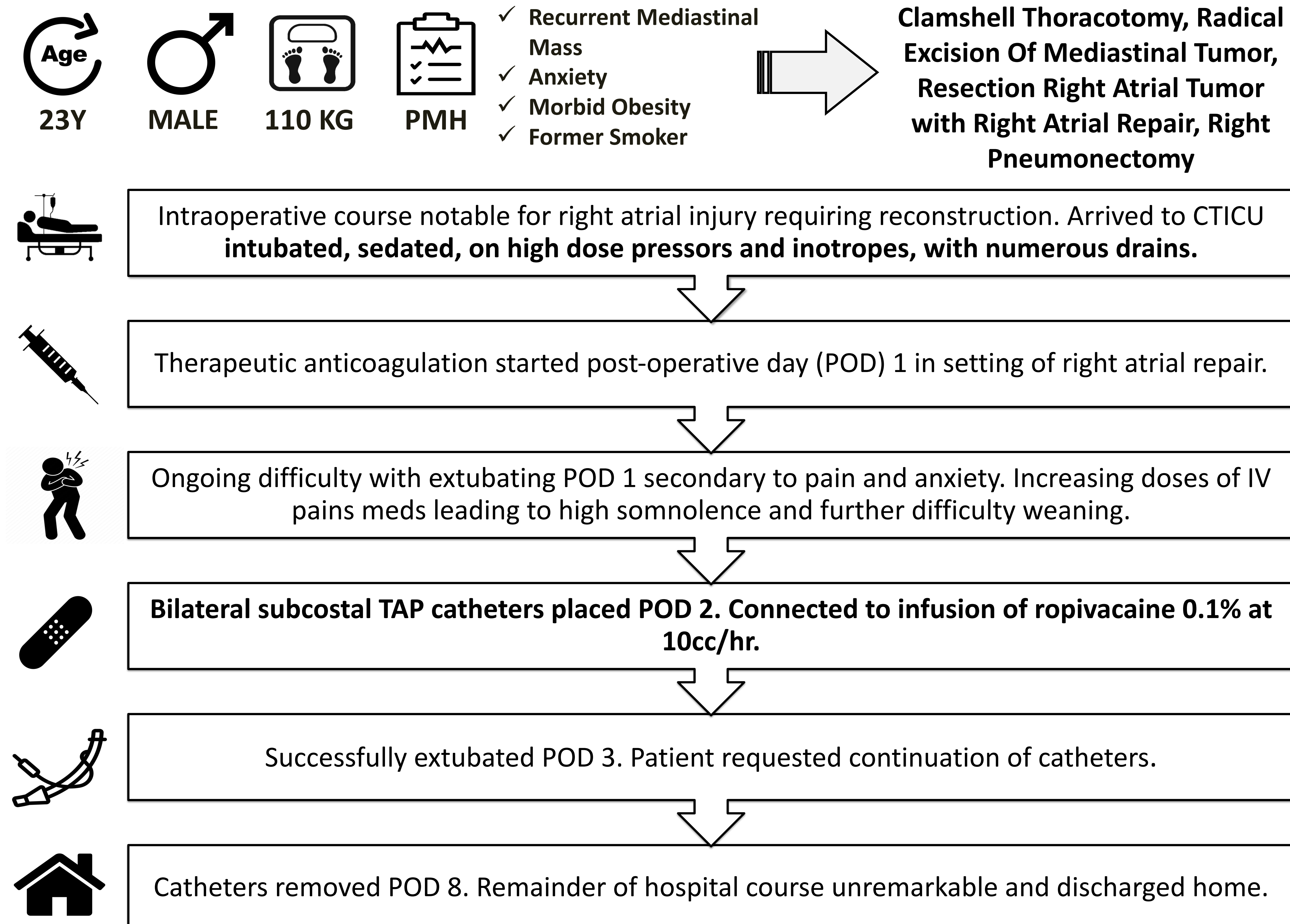


Introduction:

- Incisional pain post-thoracotomy can be **challenging**.
 - Predisposes to ventilation-perfusion mismatch, hypoxemia, infection, **increased opioid use**, increased length of stay, **increased respiratory support** (1-3).
 - 50% develop post-thoracotomy pain syndrome (1).
- Gold standard** is thoracic epidural infusion.
 - Side effects include hypotension, urinary retention, epidural hematoma.
 - Contraindicated with pharmacologic anticoagulation and coagulation disorders.
- Alternatives include paravertebral, intercostal nerve, and fascial plane blocks (1-3).
- Subcostal TAP blocks** anesthetize the T6-T9 intercostal nerves (4-5).
 - Commonly used after upper abdominal surgeries.
- Goal of early pain control is to improve respiratory mechanics and prevent conversion of acute to chronic pain.



Case Presentation:



Discussion:

- Planned preoperative **thoracic epidural placement deferred by surgical team** morning of surgery.
 - Surgical team opting for intraoperative cryoablation (ultimately not performed).
- Thoracic epidural contraindicated post-operatively in setting of **initiation therapeutic anticoagulation**.
 - Erector spinae, paravertebral, and serratus catheters deferred POD 1 given hemodynamic status, body habitus, positioning, and numerous lines and drains.
- Subcostal TAPs have been used successfully post-liver transplant to aid in extubating (4,5).
- Based on **incision location and patient confirmation of pain location**, decided on potential benefit of subcostal TAP catheters.
 - Subsequently weaned from ventilator with satisfactory pain control.
- This case report identifies a novel approach to treating post-operative clamshell pain in scenarios where **conventional regional techniques are contraindicated**.

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