

Acute Thrombosis Complicating Aneurysmal Fistula Salvage

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LINC

Possible Advantages of Using the Indigo System for Fistula Salvage

1. Cost effective: Single day case procedure with Indigo vs. catheter directed lysis with possibly a 24-48 hour hospital stay.

Bed spaces limited for over night admission.

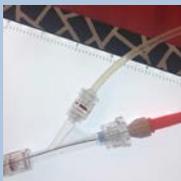
Need wards/staff that are able to manage and deal with lysis drugs on HDU/ICU/Vascular wards.

2. CDT side effects: Well documented internal bleeding especially elderly and female patients.

Interaction with other medications.

3. Contra-indications: Lysis contra-indication cases eg recent bleeds, pregnancy; need other treatment options for these patients.

Hyperkalemia – Fragile patients, arrhythmia, working close to the heart, hemolysis issues, rendering other systems useless.



Technical Reasons to Use Indigo in Aneurysmal Fistulae

- **Trackability:** Smoothness of the catheter tip, but robust enough to pass through peripheral anatomy.
- **No time limit:** Pump can stay on for the entire procedure. ADAPT technique = No/minimal blood loss. (Av. 122.3mls blood loss).



- **Catheter manipulation:** This is in particular to the CAT8 range. Full removal of clot burden from entire lumen. Using the separator allows longer duration of catheter patency.
- **Actual clearance of clot:** This is one of the few systems that fully removes clot from the vessel and out of the body. No break down of blood products, reduced risk of embolisation into the lungs or trashing of distal vessels.

Preston Technique

- Identify clot location and extent using ultrasound in the first instance.
- Soft valve sheath access (Terumo/Merit Medical).
- Fluoroscopy guided imaging with initial runs to determine clot extensions.
- Bring the tip of the catheter (Indigo CAT8/6/3) to the clot origin and start the aspiration and separator technique.
- Work your way through the clot. Catheter direction can be controlled with USS.



- Stop aspirating at any free flow of blood rather than clot.
- Final fistulogram is clear of clot; treat any underlying disease such as stenosis.

Conclusion

Wide range of patient groups: Young, pregnant, hyperkalemia, fragile vessels, aneurysmal segments, clotting disorders, day cases, cases with contraindication to lysis.

Clot age:

- The more acute the better.
- Excellent results within 48 hours.
- Good results within 7 days.
- >21 days MAY give lysis treatment prior to Indigo.



Mechanical thromboaspiration with Indigo: Staff love it- Easy, quick, and simple set up. Patients love it- High patient satisfaction feedback.

References