Mini FET Procedure In Patient With Debakey Type I Aortic Dissection

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Introduction

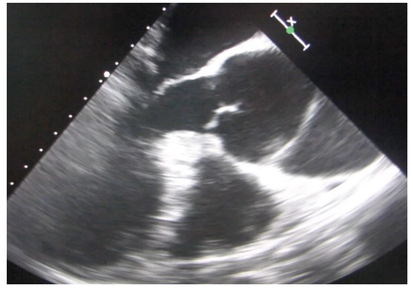
✓Minimally invasive frozen elephant trunk (FET) through J-shaped ministernotomy (MS) is now done rarely. Although some consider that mini-FET have severe limitations, some studies showed certain advantages of the minimally invasive approach. Also, in current literature, there is no common technique, so we present our technique of mini-FET.

Background

✓We present a step-by-step technique of performing mini-FET and Bentall procedures using the J-shaped MS.

Patient

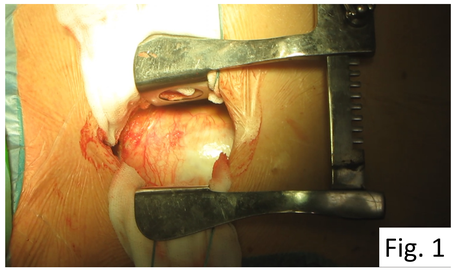
61-years-old Male
Chronic DeBakey type I aortic dissection
Severe AI
Aneurysm of Asc A (61 mm)
Aneurysm of aortic root (55 mm)
Aortic arch (45 mm)
Proximal DTA (42 mm)

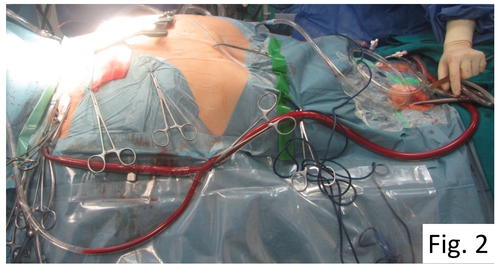




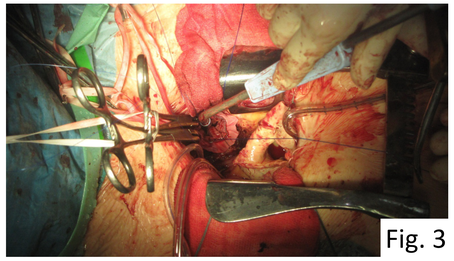
Surgical technique

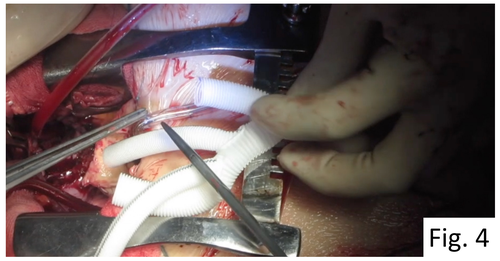
✓Minimally invasive surgical approach included J-ministernotomy through 4th ICS (Fig.1) and peripheral cannulation (Fig. 2) with limited 6-cm skin incision
✓In all cases we used moderate hypothermia, antegrade cerebral perfusion, circulatory arrest


Fig. 1

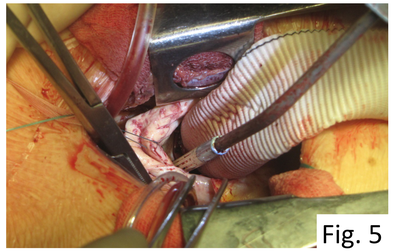

Fig. 2

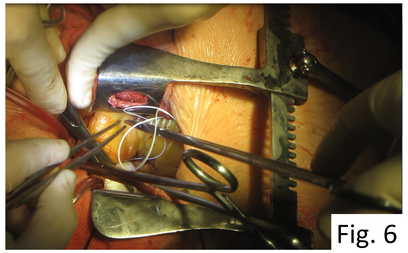
✓Next step, we performed stenting of descending thoracic aorta with distal anastomosis ("distal first") (Fig.3), and after that we reimplanted branches(Fig.4) using a tetrafurcated graft (Lupiae graft)


Fig. 3

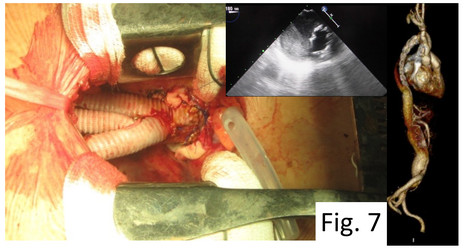

Fig. 4

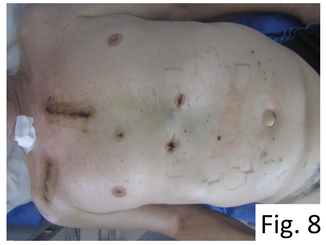
Next, Bentall-DeBono procedure was performed (Fig. 5). Chest tubes and pacing wires are establishing during cardiac arrest (Fig. 6)


Fig. 5


Fig. 6

Intraoperative view with TEE and CT-control of DTA (Fig. 7).
Discharged 7 days after operation (Fig. 8)


Fig. 7


Fig. 8

Results

Accurate patient selection and detailed preoperative planning can provide a safe FET procedure with results comparable to the conventional approach and also provide faster recovery.

Conclusions

- ✓ Mini-FET is a safe, effective and reproducible procedure with comparable results with the conventional approach.
- ✓ Certain tips and tricks help with providing optimal exposure and technical difficulty that is no different than full sternotomy.

The authors declare no relevant conflict of interests regarding this poster