

Abdominal Aortic Aneurysm Repair in a High Risk Patient - A Case Report

Gayatri Kottapalli, Vijaya Lakshmi Gattu

Abstract: Patient with infrarenal abdominal aortic aneurysm with unfovable anatomy for endovascular aneurysm repair have to repair have to undergo open surgical repair .open surgery has its own morbidity in terms of proximal clamping and declamping, bleeding and prolonged hospital stay and mortality. The proximal aortic control during open surgical repair of the aneurysm was achieved by endoaortic ballon occlusion technique.

Keywords: Abdominal aortic aneurysm, Endoaortic ballon occlusion, Adominal aortic aneurysm repair

1. Introduction

AAA's are relatively common aortic aneurysm with a prevalence of 5% in men above 65 years. Most of them clinically present at infrarenal region.

The operative mortality for elective AAA resection is less than 2%, while the overall mortality of aneurysm rupture is 70% to 80%.

2. Case Report

A 65/M, hypertensive and smoker from the past 20 years, presented with a history of abdominal pain. Clinical peripheral arterial pulsations were feeble in both the lower extremities. He had claudication on mild exertion. His coronary angiogram was suggestive of RCA block >40% and was in NYHA-3 status.

3. Imaging

MRI abdomen showed focal dilatation-renal part of abdominal aorta measuring* 6cms with intraluminal thrombus partially filling the lumen



4. Anesthetic Management

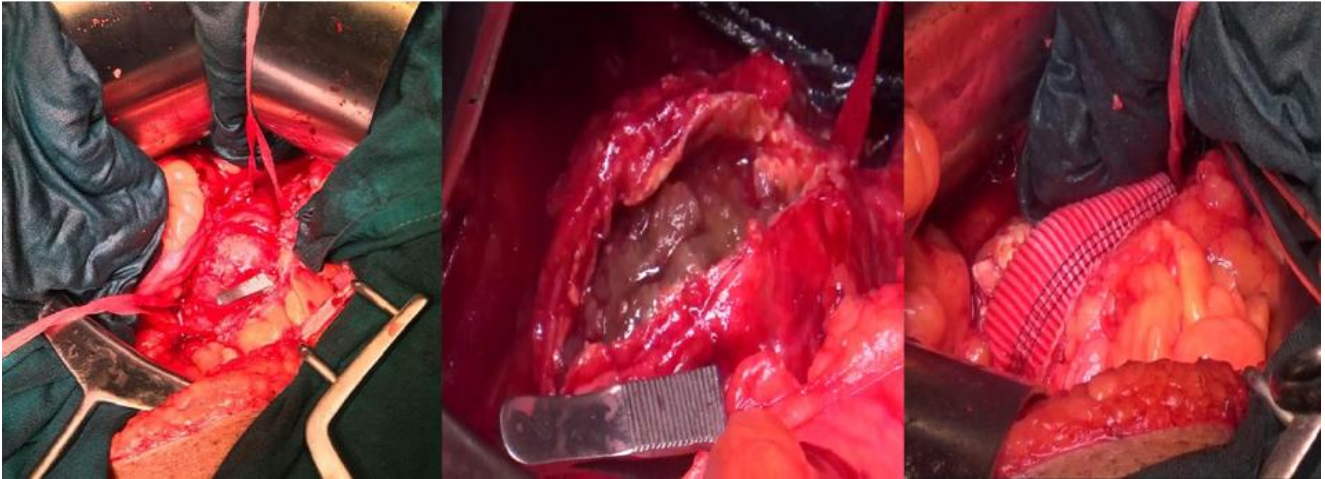
Pre anesthetic evaluation was done with emphasis on minimizing perioperative risks.

An elective open repair was planned under general anaesthesia. Pre-op monitors were attached and two wide bore peripheral cannulas were secured.

Right radial artery cannulation was done for intra arterial pressure monitoring. Thoracic epidural catheter is placed before induction of anaesthesia at the level of T8-T9 for post op analgesia. A 7F central line was placed.

After preoxygenation, premedication: Inj Midazolam 2mg slow i.v induction with propofol 30mg and fentanyl 200mcg.

- Intubation was facilitated by inj Vecuronium 7mg. Anaesthesia was maintained with Isoflurane and vecuronium.
- A midline abdominal incision was given, inj.Heparin 1mg/kg/iv was given before aortic cross clamping. Aneurysm dissected and 22mm PTFE graft was placed between two ends of aorta.
- Cross clamping time was 40mins.



- We maintained mild hypothermia with temperature around 34C. After clamp removal to counteract hypotension 2g of calcium and inotropic support with dopamine has been given.
- Arterial blood gas monitoring was done and correction has been given. At the end of surgery patient was shifted to ICU and reversed with neuro muscular block and extubated.
- Postoperative recovery was uneventful

5. Discussion

- The preanaesthesia consultation focuses on assessment of cardiovascular, pulmonary and renal risks.
- For management of postoperative pain thoracic epidural analgesia was given.
- Anaesthetic management focuses on the acute haemodynamic changes with aortic cross clamping and unclamping, maintaining organ perfusion, oxygen and attenuating ischaemic reperfusion changes.
- Blood products (FFP and platelets) are usually given according to the clinical need when haemostasis is secured and aortic cross clamp is removed.
- Acid-base status and gas exchange values should be kept within acceptable limits.

6. Conclusion

- Open repair of AAA is a major high risk surgical procedure undertaken in patients with significant comorbidities and poor physiological reserve.
- In order to achieve good outcomes, risk factors should be optimized and organ protection strategies used. Effective communication and team work are essential.

References

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