

Step-by-step suggested procedure for REBOA. According to EVTm.

1. Select appropriate side of puncture (right/left groin)
2. Prepare for aseptic puncture. Apply sterile drape.
3. Insert local anesthetics if there is time.
4. Insert the introducer needle in the common femoral artery (preferably ultrasound guided, depending on operator experience and patient pulse) by Seldinger technique.
5. Aspirate and make sure you are in the arterial vessel lumen.
6. Insert guidewire. J-tip first, to aortic zone 1. If fluoroscopy is not available, insert wire approximately 60 cm. If you feel resistance, stop and re-evaluate.
7. Remove introducer needle
8. Insert introducer sheath fully. If you feel resistance, stop and re-evaluate. Make sure that aspiration of blood is possible. If easy aspiration of blood is impossible, stop procedure. Do not insert the balloon.
9. Insert the Balloon Catheter over the guidewire. If fluoroscopy is not available, insert the balloon catheter 30-35 cm for zone 3 occlusion or 55 cm for zone 1 occlusion.
10. Inflate sterile physiological saline or contrast according to the balloon specifications. If contrast is used high viscosity will increase inflation pressure and inflation/deflation time.
11. The blood pressure shall increase rapidly after balloon inflation.
12. To avoid migration of the balloon, make sure the balloon catheter is fastened and secured in place, either by holding manually or by the use of suture or other fixation device.
13. Lack of blood pressure response may indicate misplaced balloon (wrong vessel or below bleeding focus), malfunctioning balloon or insufficient balloon diameter.
14. Balloon inflation time must follow good clinical judgement. It is recommended to deflate the balloon slowly for approximately 1 minute every 5 - 10 minutes under great caution in case of a rapid fall in blood pressure.
15. Before final deflation and removal of the balloon, the cause of the bleeding must be under control and taken care of. Deflate the balloon completely by aspirating all fluid and pull catheter and wire gently out of introducer. If resistance is felt, try rotating slowly while pulling gently on catheter.
16. Remove introducer. Maintain adequate hemostasis either by manual compression or choice of vascular closure device.
17. Always check distal arterial status with Doppler or ultrasound. If not available check peripheral arterial pulse.