

SUPPLEMENTAL MATERIAL

Table S1. PROCEDURE FOR INSERTION OF REBOA FOR OHCA

Abort procedure if technical problems like:

- severe difficulties in ultrasound (US) visualization of the artery or cannulation
- resistance when inserting guidewire, introducer or catheter
- severe bleeding
- time consuming procedure

| PHYSICIAN | PARAMEDIC |
|---|--|
| <ol style="list-style-type: none"> 1. Cut clothes from knee to groin 2. Examine with US – store image 3. Note EtCO₂ 4. Fill NaCl in wash tray 5. Apply Chlorhexidine on compresses 6. Wash selected area with forceps and compresses 7. Fill gel into the US-cover – place it on the US-probe 8. Apply US-gel on the thigh 9. US-guided cannulation of a. femoralis 10. Insert guidewire into cannulation needle, 60 cm 11. Remove needle – make skin incision with scalpel 12. Record US-video of guidewire in a. femoralis 13. Insert introducer – remove dilatator 14. Insert balloon-catheter, 50 cm 15. Check pulse - LEFT a. radialis 16. Fill balloon with 15 ml NaCl 17. Check pulse in LEFT a. radialis 18. Note time for balloon inflation and EtCO₂ 19. Suture and fixate 20. Place adhesive cover over REBOA-equipment 21. Secure guidewire with forceps | <ol style="list-style-type: none"> 1. Open kit – unpack – place sterile gloves for physician 2. Place introducer and balloon-catheter on sterile cloth 3. Prepare NaCl and Chlorhexidine – close to physician 4. Put on sterile gloves 5. Aspirate 15 ml NaCl from wash tray in 20 ml syringe 6. Hand physician forceps – place compresses on sterile cloth 7. Apply sterile drape 8. Prepare US-cover 9. Apply elastic band – place probe on the sterile drape 10. Prepare needle with 5 ml syringe 11. Ready guidewire 12. Hand physician soft end of guidewire, insert to 60 cm 13. Hand scalpel to physician 14. Mount introducer and dilatator onto guidewire 15. Control the guidewire 16. Ready balloon-catheter 17. Put stopcock on blue line 18. Put plug on the black line 19. Hand physician 20 ml syringe with 15 ml NaCl 20. Ready suture – needle-holder – scalpel 21. Cut suture 22. Ready adhesive cover 23. Cut and remove sterile drape |

Table S2.

Checklist REBOA

ID number

Date

Patient

Time

| | |
|--------------------------|--|
| Arrival at patient | |
| Start of REBOA procedure | |
| Occlusion of aorta | |
| Deflation of balloon | |

EtCO2

| | |
|---------------------------|--|
| Before occlusion of aorta | |
| After occlusion of aorta | |
| after 30 seconds | |
| after 60 seconds | |
| after 90 seconds | |
| After ROSC | |

Arterial blood gas after admission to hospital

| | |
|-----------|--|
| pH | |
| BE | |
| s-Lactate | |
| s-K | |

Physicians comments

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| |
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Inclusion criteria

Yes

No

| | | |
|---|--|--|
| Non-traumatic cardiac arrest | | |
| Age 18-75 years | | |
| Less than 10 min from arrest to bystander CPR | | |
| Pregnant | | |
| Suspected cerebral catastrophe as etiology | | |
| End stage terminal illness | | |
| Hypothermic, incl drownings | | |
| Strangulation | | |

Yes

No

| | | |
|---|--|--|
| Palpable pulse in left radial artery before occlusion | | |
| Palpable pulse in left radial artery after occlusion | | |

Yes

No

| | | |
|-------------------------------------|--|--|
| Did the procedure interrupt the CPR | | |
|-------------------------------------|--|--|

Easy

Medium

Impossible

| | | | |
|---------------------------------------|--|--|--|
| Ease of access to patient | | | |
| Ease of visualisation with ultrasound | | | |
| Ease of cannulation | | | |
| Ease of insertion of guidewire | | | |
| Ease of insertion of introducer | | | |
| Ease of REBOA insertion | | | |