CRITICAL CARE/INTERVENTIONAL NEURORADIOLOGY – WGH
STANDARD OPERATING PROCEDURE

SOP TITLE - Femoral site care at ward level and critical care

Ref No: 001
Version: 1
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Date effective from: 01/06/2018

Document History:

1st Version 01 June 2018 Approved

1st Review due 01 June 2019

- **Purpose:**

Safe management of Femoral site post Neuro interventional treatment in wards and Critical care.

- **Who:**

Patients who have undergone Neuro interventional treatment.

- **When:**

First 48 hours post treatment.

Summary

Neurointerventional procedures use access through the Common femoral Artery. A sheath is placed under Ultrasound guidance and remains insitu throughout the procedure with continuous flush of heparinised saline.The puncture is done at a 45 degree angle so the puncture site at the artery wall is usually 1or 2 cm above the skin incision. Once the procedure is completed the femoral site is closed using a device called an Angioseal. The Angioseal contains an absorbable collagen plug which is anchored into the vessel wall to ensure closure. The collegan is absorbed over a period of 45-90 days. Patients will be given a card to carry stating they have had an Angioseal device implanted and is recorded on TRAK for future reference. Day case patients will be given advice for discharge from Neurointervenional staff. Care of the site is as follows.

Care of Femoral site post Neurointerventional treatment

- The site will be covered with an adhesive clear dressing to allow visualisation .
- Instructions for mobilsation should be clearly written in the post procedural instructions by the NeuroInterventional staff.
- Patients are required to lie flat or at a maximum of 30 degrees head up in the first 90mins post deployment of Angioseal. After this period if re positioning of the patient is required it is safe to do so or mobilise as appropriate.
- Observations of the femoral site and pedal pulses should be taken at 15 mins interval in the first hour, 30 mins interval for second hour and if no evidence of heamatoma can be observed along with routine observations according to clinical area.
- Once the patient is able to mobilise, instructions should be given to avoid twisting in the groin area and sit out of bed before mobilising slowly.
- Avoid hot showers at first. Keep water temperature to warm.
- Observe Femoral site after initial mobilsation. Site should be soft to touch. Discomfort is not uncommon at this early stage
- In the event that Angioseal has not been possible the patient is required to lie flat for four hours, care of femoral site remains as above over the four hours and them mobilise slowly.
- In the unusual event that the femoral sheath is left insitu post procedure liaise with Neuroradiology staff for femoral sheath removal plans.

Complications

Angioseal failure is not uncommon but can occur. In extreme cases Pseudo aneurysms (false aneurysms) can occur which is bleeding into the artery wall and is diagnosed by Ultrasound of the site. The patient will complain of extreme tenderness and pain and the site will be hard to touch and pulsitile

In the case of heamatoma formation, 'popping' sensation or bleeding from site occurs

- Apply manual pressure at the femoral artery site (two fingers above the incision site). It should be possible to see the incision site to observe leakage. Pulsation under the fingers indicates good compression.
- Manual compression is required in a varied length of time for each patient. Average time is 10-15 minutes. Be aware that the femoral nerve sits close to the femoral artery, so the patient can feel altered sensation in the leg.
- There is no need to apply sand bags etc. as this obscures observation of the femoral puncture site.
- During 'office hours' contact the angiogram room, so the femoral site can be assessed. Be aware that staff may not be to attend immediately due to clinical commitments.
- Safe Guards are available for bleeding cessation post procedure. This may be used in the case after the patient has been 'loaded' with antiplatelets and manual compression not effective. Instructions for use are available from DCN x-ray. Adhere to these instructions carefully as over inflation and prolonged application can result in tissue necrosis of the femoral site.

Unusual Complications:

Retroperitoneal Bleed: This is extremely rare. Patient can present with abdominal/loin pain and vital sign instability. If diagnosed NHS Lothian Haemorrhagic protocol is followed.

Any concerns regarding a patients femoral site please contact ext: 32029 (Interventional room) staffed between 8-6 Monday –Friday.