Clinical Standard Operating Procedure (SOP)

HAEMOCHROMATOSIS VENESECTION

SETTING	Trust-wide
FOR STAFF	Any nurse or health care assistant who has attended the venepucture study day and has been assessed as competent by the venesection nurses
PATIENTS	Adult patients with Haemochromatosis requiring Venesection

Introduction:

Haemochromatosis is an inherited condition (diagnosis is determined by genetic testing) whereby individuals absorb too much iron from their diet causing iron overload. This is reflected in raised ferritin and transferrin saturation levels. The body is unable to naturally eradicate the surplus iron, causing the body to store the excess iron in the organs and soft tissues. If left untreated this can lead to cause organ damage and failure.

Patients with this condition require lifelong venesections; initially an induction phase to reduce the iron levels (ferritin) to below 50ug/L and thereafter to a maintenance phase to prevent the iron levels rising and to keep the ferritin level between 50 – 100ug/L. During the induction phase, venesections are carried out weekly, fortnightly or monthly. The maintenance phase is bespoke, venesections being approximately 2 monthly - 6 monthly, depending on how quickly their iron levels increase. Patents may be able to donate blood during this phase.

Procedure:

Equipment

The following equipment is required to perform the procedure:

- Blood pressure recording machine
- Blood vacutainer bottles and ICE labels
- Venesection blood collection bag
- Spring balance
- Disposable gloves
- Apron
- Pillow
- Cover for pillow
- Tourniquet
- Alcohol wipe
- Tape
- Gauze
- Plaster

Preparation:

Explain the procedure to the patient before commencing; this is to ensure the patient is informed and aware of forthcoming actions.

Record the patient's pre venesection blood pressure and pulse to ensure this is within safe limits. If systolic is less than 100 or greater than 170 or the diastolic is more than 100 consult the doctor.

Check careflow/ICE to monitor the stability of the patient's haemoglobin and to see if a full blood count is required prior to venesection, if so perform accordingly using venepuncture from the arm not required for the venesection. Obtain result from Sysmex machine. Record the results on the patient's medway/careflow note. If the haemoglobin results are consistently stable and above 125g/L then a full blood count and ferritin, when required, can be performed during the venesection process and reviewed retrospectively.

If any concerns with regard to the haemoglobin or ferritin being too low for a safe venesection discuss the results with the Haemochromatosis Clinical Nurse Specialists. If the venesection is not to go ahead the Haemochromatosis Nurses will advise an alternative date for the next appointment.

Procedure:

Check the patient's careflow history to see if the patient requires an isovolaemic venesection and if so a cannula should be sited into a vein on the opposite arm to the venesection site. Infuse 500mls normal saline while the venesection is in progress as a rapid infusion. The fluid must be prescribed in accordance with trust policy.

Sit the patient down in a semi-prone position on a bed/reclining chair and support the arm to be venesected with a covered pillow. The reclining position is in case the patient feels unwell or faint or becomes hypotensive during the procedure due to the blood being venesected.

Wash hands and put on disposable gloves and apron as per trust policy.

Prepare for the venesection by hanging the blood collection bag on the suspended spring balance.

Apply the tourniquet

Identify a suitable vein for venepuncture, preferably the anti-cubital fossa as this is easily accessible and can be kept straight and still during the procedure.

Cannulate the vein with the needle attached to the blood collection bag.

Use a tourniquet but loosen the pressure once venesection needle is in position. The tourniquet can be used and adjusted throughout the procedure to control flow/pressure.

Check the blood flow to ensure the needle is correctly positioned and that the tubing is patent and blood is draining into the bag.

When satisfied with the above, secure the needle and tubing to patients arm with tape, to prevent the needle from falling out.

Check the spring balance is weighing the blood in the blood collection bag. Ensure the spring balance is not restricted in any way. Once the required volume of blood has been collected usually 450-500mls, (check patients careflow notes) and any blood samples required have been taken from the vacutainer port of the venesection tubing, release the tourniquet and remove from the patient's arm.

Remove the needle from the vein, covering the puncture site with gauze and ask the patient to maintain pressure on the site to ensure the bleeding stops. When the bleeding has ceased cover with tape or a plaster.

Pull the blue plastic needle protector over the needle until it clicks, insert the blue needle protector into the vacutainer port to create a closed system. Drain the blood from the tubing into the blood collection bag and put on the clamps.

Place the blood bag in the blood bag/venesection waste bin.

The patient should remain seated for approximately 10 minutes and be offered a drink to replace the lost fluid.

Check and record the patient's blood pressure post procedure. If systolic is less than 100 or not within patient's normal limits, ask the patient to remain seated and repeat in 15 minutes. If any concerns discuss with a doctor. Ensure the patient feels well before they stand to prevent fainting.

Record all actions taken on medway.

Ensure the patient has follow up and email bookings to arrange if follow up is in the satellite centres.

When patient is stable discharge home.

1. FURTHER INFORMATION / QUERIES

Bristol Haemophilia Centre (Adults), Location D701, BHOC

- Haemophilia Centre Consultants: [redacted] – Contact via switchboard
- Haemophilia Specialist Nurses – Ext: [redacted] or Mobile: [redacted]
- Haemophilia SpR – Bleep: [redacted]

AUTHORISING BODY Authorised by [redacted]