Standard Operating Procedure for Venesection during COVID-19	
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Authorised by	National Clinical programme for Gastroenterology & Hepatology

1.0 Background:

To help guide Gastroenterology and Hepatology services across the country during the COVID-19 outbreak, the National Clinical Programme in Gastroenterology and Hepatology has prepared specific information and advice. This advice provides consensus recommendations from Hepatologists in Ireland for patients and healthcare professionals. In as much as is possible we have linked to the most recent national guidance documents. Please check the HSE Repository for Interim Clinical Guidance intended for the Clinical Community for the latest version of all clinical guidance https://hse.drsteevenslibrary.ie/Covid19V2.

Strict public health measures have resulted in lower numbers of confirmed cases of COVID-19 than expected. As a result there have been fewer hospital admissions and fewer deaths. Initial measures to limit liver care to emergencies only must now be reassessed. Capacity within the public hospitals and the temporary acquisition of private hospitals may allow Hepatologists/Gastroenterologists to expand their practice to include urgent, and in some instances, routine cases to prevent harm to the patients from what may be significant delays in diagnosis and treatment. This will also reduce the backlog when normal services resume. This partial relaxation of restrictions must take into account ongoing risk of COVID-19 infection in vulnerable individuals and all staff are required to follow the HSPC guidelines relating to Infection Prevention and Control Precautions for Possible or Confirmed COVID-19 in a Pandemic Setting https://www.hpsc.ie/a-z/respiratory/coronavirus/novelcoronavirus/guidance/infectionpreventionandcontrolguidance/Interim%20Infection%20Prevention%20and%20Control%20Precautions%

The Liver Working Group of the National Clinical Programme for Gastroenterology and Hepatology updated guidance April 2020 advises patients with haemochromatosis that are symptomatic or have a ferritin over 1000µg/l may be venesected with appropriate PPE. These patients may be suitable for treatment in the blood transfusion service or private hospitals.

2.0 Purpose:

To develop a Standard Operating Procedure (SOP) for Registered Nurses/Doctors to perform venesection procedure while restarting venesection services locally, or where agreed by clinicians and hospital managers for patients being treated in the blood transfusion service or in private hospital facilities during the COVID-19 pandemic.

Therapeutic venesection involves removing a set amount of blood from the vein for patients who have either a raised haematocrit or iron overload. Patients will be assessed by the Hepatology/Gastroenterology clinic prior to their first venesection. Blood tests for Full Blood Count (FBC), Ferritin, Iron & Transferrin Saturation should be assessed on presentation. Maintenance blood tests collected/documented monthly/or as indicated by the Hepatologist. FBC or Haemacue determination of Hb, should be collected prior to every Venesection. HFE genetic subtype should be documented in the first referral letter. Each patient should have a routine Hepatology clinic follow up in place, or GP review. Nurses/doctors involved in the procedure must have been assessed and competent in venepuncture and cannulation in addition to being competent to undertake this procedure.

3.0 Recommendations for COVID-19 Pandemic:

Patients	1. Pre-screening for symptoms/exposure for 24 hours before scheduled appointment 2. Self-isolate if respiratory symptoms, anosmia, abrupt change in GI symptoms, high temperature 3. If positive for COVID-19 infection, reschedule appointment only after negative check 4. Patients must come unaccompanied
Clinic	1. Clinic should be separate from other departments/patients 2. Rescreen patients and check temperature 3. Social distancing and hygiene: 2m between staff/patients; clean chairs between patients 4. PPE: disposable apron, gloves and surgical face mask 5. Patients should wear surgical masks
General	1. Daily personal symptom assessment, health statement and temperature check 2. PPE removal and hand wash between patient encounters, sterilisation of procedure area 3. Prioritise COVID-19 tests for patients and staff 4. Postpone/avoid unnecessary tests 5. Provide COVID-19 related information 6. Provide access to guidance/help/support lines

4.0 Procedure:

4.1 Equipment

• Prescription for procedure & patient consent

• Non sterile gloves and disposable plastic apron. In addition, all healthcare staff when on duty are required to wear a surgical facemask as per the HSPC guidelines https://www.hpsc.ie/a-z/respiratory/coronavirus/novelcoronavirus/guidance/guidanceforhealthcareworkers/

• Large sharps container, large enough to accommodate 1 or more blood bags and associated tubing i.e. 2.5ltr or 5ltr

• Disposable tourniquet

• Sterile gauze and micropore tape

• 2% chlorhexidine in 70% Alcohol wipe

• Blood pack unit with integral needle

• Blood weighing scales

• Prescribed IV fluids (if required)

4.2 Preparation

1. Confirm patient identity verbally with patient and prescription for procedure.

2. Ensure patient understands treatment procedure and has given consent.

3. 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 with the doctor.

4. Check medical notes/patient progress form 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. A haemacue Hb check will be carried out prior to procedure. If result is consistently within the criteria stipulated on their progress sheet then a full blood count and ferritin, if required, can be performed during the venesection process and reviewed retrospectively. Hb must be 11.5g/dl or higher, for venesection to proceed. Record the results on the progress sheet in the patient's medical notes.

5. Proceed to venesection if the ferritin level and red cell indices fall within the criteria indicated on the patient's protocol. If in any doubt discuss with the Doctor.

6. If venesection is not required discuss date of next appointment with patient and doctor.

4.3 Procedure

1. Patients will be treated in line with individual patient care plan, disease specific protocols, signed by the medical team managing the patients care.

2. Ensure that the patient is well hydrated, i.e. has consumed 500-1000ml of fluid during the hour prior to the procedure.

3. Lie the patient down in a semi-prone position supported with pillows on a bed/reclining chair. The reclining position is in case the patient feels unwell and becomes hypotensive during the procedure due to the blood being venesected.

4. Wash hands and put on disposable gloves, apron and face mask as per hospital policy.

5. Prepare for the venesection by placing the blood collection bag on a scales.

6. 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.

7. Use a tourniquet but loosen the pressure once the venesection needle is in position. Use the tourniquet to control flow / pressure.

8. Cannulate the vein with the needle attached to the blood collection pack.

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

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

11. Once the required volume of blood has been venesected (as per patient's protocol) and any blood samples that are required have been taken from the vacutainer port of the venesection tubing, release the tourniquet and remove from the patients arm.

12. Remove the needle from the vein, covering the puncture site with cotton wool or gauze and ask the patient to maintain pressure on the site to ensure the bleeding stops. Cover with tape or a plaster.

13. Pull the blue plastic needle protector over the needle until it clicks in to place, 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 clamp.

14. Place the blood bag in the Zulu waste bin.

15. The patient should remain in the reclining position for at least 10 minutes and be offered a drink and biscuits to replace the lost fluid. Record observation of blood pressure, respiration and pulse. If within normal limits, sit patient up, check venepuncture site and tape. If observations outside normal parameters or there are concerns about the patient's condition such as feeling dizzy, nauseous or clammy, leave the patient lying down, give oral fluids if they are able tolerate and repeat observations' after 10 minutes. If no improvement contact medical staff for advice. To ensure patient has suffered no side effects/complications as a result of the procedure.

16. If blood pressure and pulse is within normal limits the patient is discharged home. Contact details are given on discharge.

17. Advise the patient that the pressure dressing should remain in place for several hours. They should avoid smoking for at least one hour and it is suggested avoiding strenuous exercise or work for 6 – 8 hours. Maintain adequate fluid intake.

18. Record action taken on the patient progress form and in medical notes.

19. Make the next appointment. If unsure when this should be, discuss with the Doctor.

This document was compiled by the Liver Working Group under the auspices of the National Clinical Programme for Gastroenterology and Hepatology and it has been endorsed by the Irish Society of Gastroenterology.

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