

THE NORTH THORESBY PRACTICE

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Protocol for D-Dimer Assay

D-Dimer point of care tests are to be carried out as per GP/NP instructions, following the manufacturer's instructions at all times.

Practice nurses can however also initiate a test where it is clinically indicated.

When a thrombus occurs, a process of fibrinolysis occurs, which as a result produces D-dimer as a by-product. Where a thrombus occurs, this would naturally raise the D-dimer levels which would be evident on a point of care test. However, it is important to note D-dimer levels can be raised by other conditions including cancer, pregnancy, infection, inflammation and disseminated intravascular coagulation. Where there are low levels of D-dimer a negative test is likely, however the clinician will assess the situation, based upon their clinical judgement, wells score and any influencing factors.

Wells Score

DVT unlikely with a score or less than 1

DVT likely with a score of 2 or more

Wells score can be completed on S1 using the D-Dimer/modified probability score (example attached with protocol)

The consultation

- Introduce yourself to the patient
- Gain an insight of the patients understanding and the purpose of the assessment and the reason why the test has been requested.
- Explain the procedure to the patient , giving them the opportunity to ask questions
- Confirm consent with the patient

- Complete history taking for the purpose of completing the well probability score template
- Advise the patient the test takes 10 minutes for the result to appear

Equipment

- Gloves
- Apron
- D-dimer point of care test including testing solution
- Sharps bin
- Cotton wool
- Lancet
- Template on S1

Procedure

- Ensure the patient consents to the procedure
- Ask the patient to provide a finger excluding thumb and index finger. Ensure the finger is visibly clean, if visibly unclean, ask the patient to wash their hands with soap and water, ensure area is dried thoroughly.
- Using the lancet, puncture the skin and encourage site to bleed.
- Once a decent amount of blood is seen, use the pippet as provided within the point of care pack, to withdraw blood from the finger.
- Ask the patient to hold the cotton wool bud on to finger firmly to aid stoppage of the bleeding
- As per manufacturer's instructions, instil one drop of blood on to the point of care cassette, followed by 2 drops of the control solution
- Make a note of the time and be aware to check results in 10 minutes.
- Begin to complete the modified wells probability score on the S1 template.
- Also ask to examine legs. To measure the calf circumferences to ascertain any swelling more than 3cms, ascertain if there is any leg tenderness, making note of its location and whether there is any erythema, inflammation or heat.
- Once the probability score is completed and 10 minutes have passed the result from the point of care cassette can be interpreted.
- Advise the patient of the result and complete the remaining elements of the template.
- Make the requesting clinician aware of result to allow them to provide further advice, assessment or investigations for the patient.
- Ensure all is documented on S1.

References

[Recommendations | Venous thromboembolic diseases: diagnosis, management and thrombophilia testing | Guidance | NICE](#)

[NICE Guideline Template](#)

These guidelines should be reviewed annually to ensure standard practice is the same and publications and evidence based practice remain up to date.

Next review on or before May 2022

Completed by Gemma Hooper