Appendix 3

Medical Directive – Preoperative Pregnancy Testing

Self-Learning Package

Corporate Nursing Practice – September 2018

Introduction

This Medical Directive provides Nurses working in the Same Day Surgery department at Quinte Healthcare (QHC), and who have met the inclusion criteria according to the QHC Medical Directive, with the authority to administer preoperative Pregnancy Testing to female patients who are booked for a surgery.

To meet the requirements for implementing this Medical Directive you must:

1. Be a Nurse working in the Same Day Surgery Units at QHC Belleville General Hospital or QHC Trenton Memorial Hospital who meet the inclusion criteria.
2. Complete this Self-Learning Package.
3. Review QHC's Medical Directive entitled *"Preoperative Pregnancy Testing".*
4. Sign the *Self-Appraisal of Competency Statement for Authorized Staff* (Appendix 4), indicating that you have the knowledge, skill and judgment to initiate the Medical Directive for Preoperative Pregnancy Testing and return the Self-Appraisal of Competency Statement to your Manager.

After fulfilling these requirements, the nurse will be able to implement the Preoperative Pregnancy Testing Directive in any of the QHC Same Day Surgery Units.

Medical Directive

The College of Nurses of Ontario (CNO) and the College of Physicians and Surgeons of Ontario (CPSO) support the use of Medical Directives. Correctly used, Medical Directives are an excellent means of providing timely, effective, and efficient patient care, using the expertise of both the physician who orders the Medical Directive and the nurse who uses discretion and judgment when implementing it.

Medical Directives are comprehensive instructions by the physician to other health care providers. Medical Directives pertain to any patient who meets the criteria that has been established within the Medical Directive. The Medical Directive contains the delegation and the authority to carry out the treatment, interventions, or procedures that are specified in the Medical Directive, providing only certain conditions and circumstances exist.

Medical Directives are enacted to authorize staff to initiate orders for specified patient case groups in accordance with specified conditions. Medical Directives are always written. The patient's best interest should always be taken into consideration.

The Nurse who initiates this Medical Directive is responsible for the following:

- Clarifying that informed consent has been obtained.
- Assessing the patient to determine whether the specified patient conditions have been met and any limitations or contraindications have been identified.
- Knowing the risks to the patient of implementing the Medical Directive.
- Possessing the knowledge, skill and judgment required to safely implement the Medical Directive.
- Knowing the predictability of the outcomes of the intervention.
- Determining whether management of the possible outcomes is within the scope of his/her practice; if so, whether she/he is competent to provide such management and, if not, whether the appropriate resources are available to assist, as required.
- Knowing to contact the physician responsible for the patient if orders require clarification.

- Knowing to contact physician if any adverse event occurs as a result of implementing this Medical Directive.

For more information on Medical Directives, see *Directives: Revised 2011* located in the *Compendium of Standards of Practice for Nurses in Ontario.*
http://www.cno.org/Global/docs/prac/41019_MedicalDirectives.pdf

Pregnancy Testing

Purpose:

This type of human chorionic gonadotropin (HCG) test measures the specific level of HCG in the urine. HCG is a hormone produced in the body during pregnancy. A urine dip with a reagent strip is a quick screening the nurse can perform.

Inclusion Criteria
The female patient:
- ✓ Is registered to the Same Day Surgery Department
- ✓ Has been booked for a surgical procedure requiring a general or regional anaesthetic
- ✓ Is between the ages 12 and 50 years old
- ✓ Has consented to have their urine analyzed for the purpose of pregnancy testing
- ✓ Do not have contraindications or meet exclusion criteria

Contraindications
Female patients are excluded from preoperative pregnancy testing if they:
- ✓ Do not meet inclusion criteria
- ✓ Do not consent to the procedure
- ✓ Have results of a preoperative pregnancy test that has been performed in the last four days,
- ✓ Have had a hysterectomy,
- ✓ Are pre-menarchal (have not yet started having periods), or
- ✓ Are post-menopausal (**no periods for one yea**r *and* older than age 50)

Preoperative pregnancy testing may not be possible in emergency situations in which patients require immediate surgical intervention.

Equipment
The Siemens Clinitek Status+ will be used to perform the Point of Care Pregnancy Test.

If you need assistance, please contact:

Point-of-Care Testing Technologist
Phone: 613-969-7400 ext. 2404
Fax: 613-968-9912
Email: krichmond@qhc.on.ca

Siemens Technical Support
Phone: 1-877-229-3711
Siemens Healthcare Diagnostics Ltd.
1200 Courtney Park Drive East
Mississauga, ON L5T 1P2

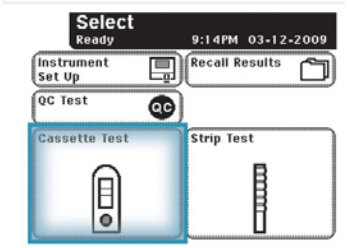
Quality Control Performed by POC staff

Procedure

During the nursing assessment the Nurse will consider the limitations and the contraindications for implementing the Medical Directive

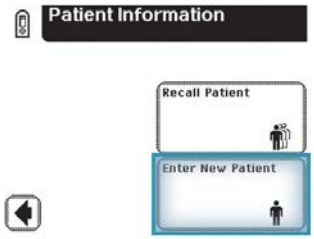
Patients will be asked to provide a urine sample upon arrival to the Same Day Surgery Unit.

Steps to Using the Siemens Clinitek Status+ for hCG testing:

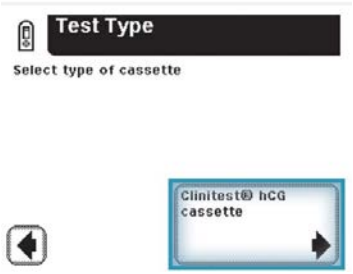


1. Ensure instrument is turned on and ready to use.
2. Press the 'Cassette Test' button on the screen.

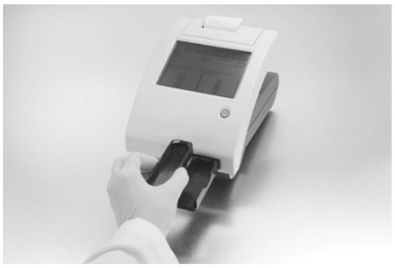
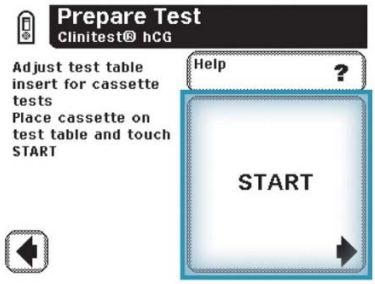
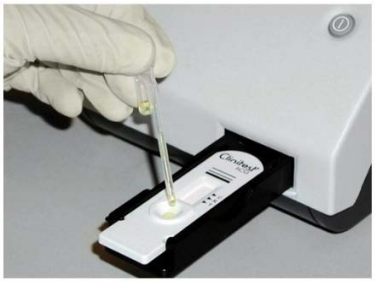
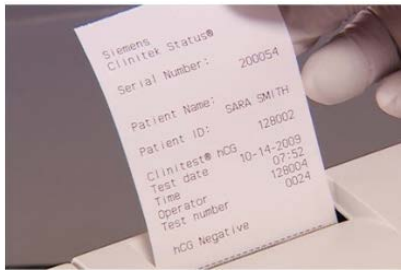
3. Press the 'Enter New Operator ID' button. This will be the nurse's assigned Operator ID.
4. Scan or enter Operator ID number by using the numeric touch pad on the screen, and press the 'Enter' key.



5. Press the 'Enter New Patient' button.
6. Scan patient BARCODE number from patient labels and press the 'Enter' key.



7. On the Select type of cassette screen touch 'Clinitest hCG cassette'.
8. The lot number of the Clinitest hCG is on the foil package, if using the same lot as the previous sample, select "use last lot". OR select Enter new lot and expiration date and scan the barcode on the foil package to drop in lot and expiration date.

	9. Ensure the urine is well mixed. 10. Make sure the test table insert is in position for a cassette
	11. Remove the test cassette from the foil package and place the cassette on the test table. 12. Touch the 'Start' button.
	13. Draw the urine sample to the line marked on the pipette (approximately 0.2 mL)
	14. Add the entire contents of the pipette into the sample well of the test cassette. **Empty only one pipette stem into the sample well.** 15. At the end of the 8 second countdown, the test table and cassette will automatically be pulled into the analyzer. 16. A timer will count down the time remaining in analyzing the cassette results.
	17. The test results will printout automatically, and be displayed on the screen when the printing is complete. (e.g., hCG negative/ hCG positive) 18. Results will automatically be populated in the patients Meditech record 19. Remove and discard the used cassette into the appropriate container, wipe the table insert, if necessary. 20. Press the 'Done' button to return to the main menu

Testing Tips

The test results will take approximately 2-5 minutes

Sample Handling

- Collect specimen in a clean, dry container – specimens collected at any time of day may be used.
- Test fresh sample within 2 hours of collection.
- Refrigerate specimen at 2°C to 8°C for up to 72 hours if the testing is not done immediately.
- Refrigerated samples should be brought to room temperature prior to testing.

Hints to Avoid Errors

- Use only pipette provided with each cassette to ensure proper volume of 200 µL is dispensed.
- Do not overfill sample well with more than one pipette stem of sample.
- Do not empty overflow reservoir. It is normal for excess sample to remain in overflow reservoir. Do not try to dispel it.
- Do not add sample to the sample well until after you press the START button.
- Visibly bloody or highly colored samples should not be tested

Results Interpretation

- An additional or alternative test may be required if there is a positive result obtained on an individual where pregnancy is not suspected or a borderline result.

Cleaning Instructions

1. Clean the analyzer case with a soft cloth, dampened with a mild, non-abrasive detergent or cleaning solution, Virox wipes may also be used.
2. The test inserts can be cleaned in the sink with running water, dry with a cloth before placing back in instrument.

Documentation and Communication

Following QHC documentation policy and CNO standards, the nurse will document the appropriate assessments, treatments, patient responses and outcomes.

The pregnancy test results will be available after the test is completed. These results will also populate into the patients Meditech record.

The Same Day Surgery Nurse will communicate the results of the pregnancy test to the attending surgeon; positive test results require a conversation with the attending surgeon and

anesthesiologist to establish plan of care. Patients cannot proceed to the Operating Room until the test results are known.

References

Canadian Medical Protective Association. (2018). *Is your patient a women of reproductive age? Consider pregnancy.* Retrieved from https://www.cmpa-acpm.ca/en/advice-publications/browse-articles/2018/is-your-patient-a-woman-of-reproductive-age-consider-pregnancy

Operating Room Nurses Association of Canada (ORNAC). (2017). Communication during care transitions. In ORNAC *Recommended Standards for Perioperative Nursing Practice* (13th ed). (pp. 349-351). Ottawa, ON: ORNAC.

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Zercher,A.(2014).hCG validation study. Muenchen, Germany: Simens Healthcare Diagnostics Inc.