MEDICAL DIRECTIVE
HYOSCINE BUTYLBROMIDE (BUSCOPAN) INJECTION FOR DIAGNOSTIC IMAGING PROCEDURES

Approved by: Medical Advisory Committee – February 28, 2012

Authorizing physician(s)

All Radiologists prescribing

1. CT examinations: Abdomino-pelvic CT Enteroclysis (52C), Abdomino-pelvic CT Colonography (49A or 49C)
2. MRI examination: MRI of the Abdomen (including but not limited to liver, MRCP, kidney, pancreas, adrenal, or MR angiogram) or Pelvis (including but not limited to routine pelvis, bladder, rectal cancer, rectal fistula, or MR angiogram).

Authorized to who

A Medical Radiation Technologist (MRT) or Diagnostic Imaging Registered Nurse (RN) oriented to this directive and knowledgeable in the administration of Hyoscine Butylbromide (Buscopan).

Patient Description / Population

Patients undergoing Computer Tomography (CT) or Magnetic Resonance Imaging (MRI) scans as listed below.

Medical Directive Description/Physician's Order

1. Give Hyoscine butylbromide 20 mg IV/IM immediately prior to commencement of the following scans:
   CT examinations: Abdomino-pelvic CT Enteroclysis (52C)
   Abdomino-pelvic CT Colonography (49A or 49C)

   Administer as follows:
   Intravenous: 1 mL of Hyoscine Butylbromide (Buscopan) 20 mg/mL will be injected into an IV or saline lock over a minimum of 1 minute, followed with an infusion or flush of 10-20 mL of Normal Saline
   or
   Intramuscular: 1 mL of Hyoscine Butylbromide (Buscopan) 20 mg/mL will be injected intramuscular

2. Give Hyoscine butylbromide 20 mg IM immediately prior to commencement of the following scans:
   MRI examination: MRI of the Abdomen (including but not limited to liver, MRCP, kidney, pancreas, adrenal, or MR angiogram) or Pelvis (including but not limited to routine pelvis, bladder, rectal cancer, rectal fistula, or MR angiogram).

Administer as follows:
Intramuscular: 1 mL of Hyoscine Butylbromide (Buscopan) 20 mg/mL will be injected intramuscular.

Contraindications to the implementation of the Directive:
Patient answers yes to any question on the patient screening form and/or reports any of the following contraindications to hyoscine butylbromide:

- Hypersensitivity to hyoscine butylbromide, or atropinics (see Warnings and Precautions) or to any of the product excipients (see Dosage Forms, Composition and Packaging).

- Parenteral administration is contraindicated in patients with myasthenia gravis, untreated narrow angle glaucoma, prostatic hypertrophy with urinary retention, stenotic lesions of the gastrointestinal tract, tachycardia, angina, cardiac failure and megacolon.

- Hyoscine butylbromide should not be given by intramuscular injection to patients being treated with anticoagulant drugs since intramuscular haematoma may occur. In these patients, the subcutaneous or intravenous routes may be used.

Specific conditions/circumstances that must be met before the Directive can be implemented

The Radiologist will document the appropriate CT coding (52C or 49A or 49C) or MRI coding which includes the administration of Hyoscine Butylbromide (Buscopan) in the Physician's Order section of the CT/MRI requisition.

The MRT/RN will complete the patient information checklist, explain the procedure to the patient and obtain consent for the procedure, including the administration of Hyoscine Butylbromide (Buscopan).

The MRT/RN will screen the patient for contraindications to Hyoscine Butylbromide (Buscopan) using the Diagnostic Imaging Patient Screening Form. The MRT/RN will consult with the Radiologist on duty in CT or MRI if the patient meets any of the contraindication criteria or the MRT/RN has a concern with proceeding with the Medical Directive.

Identify relevant Control Act or Added Skill associated with this Directive

<u>Added Skill</u>

CT and MRI Technologists are certified to perform intravenous insertions and have the knowledge, skill and judgment to perform intravenous and intramuscular injections.

A self-directed learning package is available for the MRT/RN to review.

Documentation requirements

The MRT/RN will document the implementation of the directive including details of the injection of Hyoscine Butylbromide (Buscopan) on the patient's medical record and will include the patient's response to the medication and procedure. The MRT/RN's documentation will include the drug name, dose and route of administration.

Reactions must be filed and reported through the Better system according to the Patient Safety in Diagnostic Imaging Policy. Any reaction or adverse event suspected to be related to the implementation of this Medical Directive must be reported to the physician on duty and to the Clinical Leader. The event will be documented in the patient's medical record.

Review/Evaluation Process (how often/by who)

The MRT/RN will:

- Review the Medical Directive and eCPS monograph annually
- Receive education on the procedure for the administration of Hyoscine Butylbromide (Buscopan) via the self-directed learning package or education session.
- Pass injection competence quiz (scoring over 75%) after reviewing educational material
- Review educational material annually

Related Documents
Patient screening form prior to administration of hyoscine butylbromide

References

Regulated Health Professionals Act
http://www.e-laws.gov.on.ca/html/statutes/english/elaws_statutes_91r18_e.htm

College of Medical Radiation Technologists of Ontario Comprehensive Guidelines
http://www.cmrto.org

Canadian Pharmacists Association, CPS Drug Monographs
http://www.e-therapeutics.ca/cps

R. Dyde et al. Precautions to be taken by radiologists and radiographers when prescribing hyoscine-N-butylbromide. Clinical Radiology 2008;63:739-743