CAR Standard for the Performance of Fluoroscopic Transcervical Fallopian Tube Catheterization

Approved: April 2006

The standards of the Canadian Association of Radiologists (CAR) are not rules, but are guidelines that attempt to define principles of practice that should generally produce radiological care. The physician and medical high-quality physicist may modify an existing standard as determined by the individual patient and available resources. Adherence to CAR standards will not assure a successful outcome in every situation. The standards should not be deemed inclusive of all proper methods of care or exclusive of other methods of care reasonably directed to obtaining the same results. The standards are not intended to establish a legal standard of care or conduct, and deviation from a standard does not, in and of itself, indicate or imply that such medical practice is below an acceptable level of care. The ultimate judgment regarding the propriety of any specific procedure or course of conduct must be made by the physician and medical physicist in light of all circumstances presented by the individual situation.

I. INTRODUCTION

Fallopian tube disease is the most common cause of female infertility. Evaluation of the fallopian tubes is an integral early step in assessing the underlying cause of infertility.

Hysterosalpingography has been used for many years to evaluate the structure and patency of fallopian tubes. In up to 25% of these studies, proximal fallopian tube obstruction is demonstrated. This may be technical due to underfilling or spasm. Alternatively, it may be due to obstruction or occlusion with a wide variety of etiologies including debris, endometriosis, adhesions or fibrosis. Hysterosalpingography is not able to differentiate functional from anatomic occlusion.

In an attempt to diagnose and treat proximal fallopian tube occlusion a procedure known as fluoroscopic transcervical fallopian tube catheterization (FTC) was developed.

This procedure is performed on an outpatient basis. A hysterosalpingography device is placed on the cervix or within the endometrial cavity and then acts as a sterile conduit for the passage of catheters and wirers. This allows direct cannulation of the fallopian tube cornua for improved diagnosis and treatment of proximal fallopian tube obstruction.

II. RADIOLOGIST QUALIFICATIONS

Physicians involved in the performance, supervision and interpretation of FTC should be Diagnostic Radiologists and must have a Fellowship or Certification in Diagnostic Radiology with the Royal College of Physicians and Surgeons of Canada and/or the Collège des Médecins du Québec. Also acceptable are equivalent foreign Radiologist qualifications if the Radiologist is certified by a recognized certifying body and holds a valid provincial license.

As new imaging modalities and interventional techniques are developed additional clinical training, under supervision and with proper documentation, should be obtained before radiologists interpret or perform such examinations or procedures independently. Such additional training must meet with pertinent provincial/regional regulations. Continuing professional development must meet with the requirements of the Maintenance of Certification Program of the Royal College of Physicians and Surgeons of Canada.

III. TECHNOLOGIST CREDENTIALS/NURSING SERVICES

The Medical Radiation Technologist should have Canadian Association Medical Radiation Technologist certification or be certified by an equivalent licensing body recognized by the CAMRT.

Under the overall supervision of the Radiologist, the Technologist will have the responsibility for patient comfort and safety, for examination preparation and performance, for image technical evaluation and quality,
and applicable quality assurance. The training of Technologists specifically engaged in Interventional Radiology shall meet with applicable and valid National and Provincial Specialty qualifications.

Nursing services may be required before, during, and after the procedure for patient care, sedation and monitoring. If a qualified nurse is not available an appropriately trained Technologist may perform some of these functions under the direction of the Radiologist. Adequate numbers of properly trained staff should be available to assist the Radiologist, particularly in the event of an emergency.

IV. INDICATIONS AND CONTRAINDICATIONS

A. Indications

Diagnostic

1. Assess patency
2. Differentiate functional and organic occlusion
3. Anatomic tubal detail

Therapeutic

1. Open proximally occluded tubes
2. Open mid-isthmic obstruction
3. Open occlusions at site of previous microsurgery

B. Contraindications

Relative Contraindications

1. Contrast allergy

Absolute Contraindications

1. Menstruation
2. Active tubal infection (PID)
3. Pregnancy

IV. EXAMINATION TECHNIQUE(S), PERFORMANCE AND RELATED MATTERS

FTC can be accomplished utilizing a wide variety of equipment that will vary depending on the institution. All patients should have the procedure on day 6-13 of their cycle (i.e., not during menstruation and prior to ovulation), or on day 14-28 if not sexually active that cycle. Patients should usually receive oral antibiotics for five days commencing two days prior to the procedure. Alternatively, if antibiotics have not been given prior to the procedure these can be commenced at the time of the procedure. All patients require intravenous access and adequate monitoring if narcotics and sedatives are to be utilized.

Irradiation of the female pelvis occurs during fluoroscopic FTC. Adverse effects on maternal ovaries as well as genetic risks must be fully understood by the physician performing the procedure. The procedure must be optimized to give as low a dose as possible.

Potential Complications
1. Tubal perforation (3-11%)
2. Vasovagal reactions
3. Acute pelvic inflammatory disease (rare)
4. Tubal pregnancy (10%)

VI. REFERENCES