



CAR Standards for Genitourinary Tract Interventional Procedures Ureteral Stents

1. INTRODUCTION

As per nephrostomy.

2. DEFINITION

Ureteral stents are any of a variety of different devices used to conduct urine from the kidney to the bladder. Their major advantage is the ability to decompress the kidney and maintain renal function without the need for an external drainage system. Stents may be placed retrogradely (generally preferred) or antegradely via a percutaneous track. They may be completely internalized, which is most comfortable, but this requires either cystoscopy or an interventional procedure for exchange or removal or internal-external use which is less comfortable, but easier to maintain.

3. RADIOLOGIST QUALIFICATIONS

That Physicians involved in the performance, supervision and interpretation of genitourinary tract interventional procedures 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 foreign Specialist qualifications if the Radiologist so qualified holds an appointment in Radiology with a Canadian University.

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.

4. INDICATIONS AND CONTRAINDICATIONS

A. Indications

The primary indications are (complete or partial) obstruction or perforation of the ureter. Stents are sometimes placed prophylactically prior to surgery, which could damage the ureter or in association with lithotripsy.

B. Contraindications

1. As per percutaneous nephrostomy
2. Cystitis, radiation damage to the bladder
3. Bladder outlet obstruction and incontinence are relative contraindications unless treated simultaneously.
4. Contracted bladder
5. Frank purulent urine or significant bleeding into the collection system may be indications to delay stent placement

5. EXAMINATION TECHNIQUES, PERFORMANCE AND RELATED MATTERS

A. Pre-Procedural Preparation

1. As per nephrostomy.
2. If stent placement is being considered, but a nephrostomy is planned as the initial therapeutic step, care should be taken to place the nephrostomy access in a position (i.e upper or middle calyx) which will facilitate subsequent stent placement.

B. Procedural Care

1. As per nephrostomy.
2. The stent chosen should be of an appropriate length for the patient or a "universal" type.
3. It is sometimes appropriate to place a nephrostomy for 24 hours post-stent insertion (i.e. if leading into the collecting system) to allow for temporary external drainage if necessary.

C. Post-Procedural Care

1. As per nephrostomy.
2. Immediate post-procedure monitoring will vary with patient condition and level of procedural

sedation/analgesic.

3. Appropriate follow up should be arranged.