Cystoscopy Laboratory Simulation

**Preparation**
Station ideally has two residents and on faculty preceptor

Equipment per station:
- One cystoscope (Including a 30 Degree optic, bridge and sheath)
- One 1000 cc bag normal saline
- One intravenous tubing
- One camera and light cord
- One endoscopy tower
- Simulation model (see below):

**Simulation Model and Inventory/Setup**
- One white common balloon and one small rubber ball cored to a size equal to the outer sheath diameter of the cystoscope
- Two clips (hemostats or common alligator clips) for ureters.
- One 10 cc syringe with a 25 gauge tuberculin needle and blue food coloring for demonstrating ureteral patency
- Red Sharpie marker to draw details on bladder model
- Tuberculin syringe with 25 gauge needle
- Blue food dye
- Surgical or egg crate foam sections measuring approximately 12” x 24”

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Simulation equipment
Rubber ball for urethra cored

Balloon blown up and marked
Balloon inverted and rubber ball in place
Hemostat/alligator clip placed on outside mimicking a ureteric orifice

Tuberculin syringe injecting blue food dye mimicking a patent ureter demonstration

Two sections of surgical foam or egg crate foam for support of model. Tape to hold model in place

The model being taped onto surgical foam

Beginning simulation

Lab Sequence
1. The intended sequence of events for this lab involves an initial OSATS (observed structured assessment of technical skills):
   a. 5 minutes cystoscopy assembly OSATS and
   b. 5 minute diagnostic cystoscopy OSATS.

   The faculty should make certain that none of the equipment is damaged and only intervene if damage to the equipment appears eminent.
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Competency Assessment

1. Cystocope assembly
Residents should be able to assemble the cystoscope correctly and identify the parts correctly in less than 5 minutes to be considered competent in this task. Correct assembly and obtaining an image is necessary for competency. Correctly naming and proper order of assembly will be noted as mastery of this task.

2. Diagnostic cystoscopy
Residents should be able to identify both ureteric orifices and identified each of the intra-vesicle pathologic features in less than 5 minutes in order to be considered competent.

Competency is obtained if all intra-vesical landmarks and their location are noted.

Properly rotating the scope to maximize the use of the angled lens and minimize urethral manipulation and torque will be noted as mastery of this task.