# Urinary Bladder / Female Urethra

Updated
11/25/2023

Indications: bladder mass, bladder diverticulum, female urethral/periurethral diverticulum.

Once patient arrives in the department, tell him/her not to use the bathroom and give the patient 16 oz water to drink immediately. The bladder needs to be at least partially distended for the best exam.

If the patient has a Foley catheter, clamp it before exam to distend the bladder. Remember to unclamp it at the end of the exam.

Full Pelvis FOV: Iliac crests to few slices below introitus/anus (top/bottom coverage), greater trochanter to greater trochanter (right/left coverage), anterior pelvic wall skin to posterior buttock skin (front/back coverage).

Bladder FOV: centered on bladder, FOV 13-15 cm, 320 x 320 matrix, cover several slices beyond bladder wall and mass in every plane.

If a MR cystogram is needed, the dilution is 2 mL Clariscan or 1 mL Gadavist added to 250 mL normal saline and mixed well. The patient will need a Foley catheter for a cystogram.

Go to MRIMaster.com for a guide of proper positioning.

| Pulse Sequence | PACS Name | plane | fat sat | slice (mm) | gap (mm) | first slice | Field of View |
|---|---|---|---|---|---|---|---|
| **GLUCAGON** - 1 mg slow IV push **just before** beginning imaging. | | | | | | | |
| T2 TSE | T2 TSE AX | ax | no | 3.5 | 0.5 | top | bladder |
| T2 TSE | T2 TSE SAG | sag | no | 3.5 | 0.5 | right | |
| T2 TSE | T2 TSE COR | cor | no | 3.5 | 0.5 | front | |
| T2 HASTE/SSFSE | T2 AX | ax | no | 7 | 1.4 | top | full pelvis |
| T2 HASTE/SSFSE | T2 FS AX | ax | yes | 7 | 1.4 | top | |
| T1 VIBE/LAVA | T1 FS PRE SAG | sag | yes | 3.5 | 0.6 | right | |
| T1 VIBE/LAVA | T1 FS PRE AX | ax | yes | 3.5 | 0.6 | top | |
| **GLUCAGON** - 1 mg slow IV push **just before** giving IV contrast. | | | | | | | |
| **CONTRAST** - 2 mL/sec standard dose gadolinium (0.2 mL/kg Clariscan or 0.1 mL/kg Gadavist) followed by 20 mL saline flush. | | | | | | | |
| T1 VIBE/LAVA | T1 FS 20 SEC AX | ax | yes | 3.5 | 0.6 | top | full pelvis |
| T1 VIBE/LAVA | T1 FS 60 SEC AX | ax | yes | 3.5 | 0.6 | top | |
| T1 VIBE/LAVA | T1 FS POST SAG | sag | yes | 3.5 | 0.6 | right | |
| T1 VIBE/LAVA | T1 FS POST COR | cor | yes | 3.5 | 0.6 | front | |
| Diffusion (b50, b1000, ADC) | DIFFUSION AX | ax | yes | 6 | 1 | top | |
| Roll the patient 3 times on scanner to mix the excreted contrast in bladder. | | | | | | | |
| T1 VIBE/LAVA | T1 FS 5 MIN AX | ax | yes | 3.5 | 0.6 | top | full pelvis |

**RECONS:**

axial and sagittal subtractions