

MRI Penis/Scrotum

Updated 11/04/23

Reviewed 05/14/25

Indications: testicular/penile/scrotal tumor, infection, pain or trauma and implant integrity/malfunction.

Place a towel under the scrotum to elevate from between thighs. Penis is laid in midline pointing towards the patient's head and taped lightly in place.

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).

Penis/Scrotum FOV: FOV 18-20 cm, 256 x 256 matrix, cover several slices beyond penis and scrotum in every plane.

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
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	
T2 TSE	T2 AX	ax	no	4	0.8	top	penis/scrotum
T2 TSE	T2 FS AX	ax	yes	4	0.8	top	
T2 TSE	T2 COR	cor	no	4	0.8	front	
T2 TSE	T2 SAG	sag	no	4	0.8	right	
T1 VIBE/LAVA	T1 FS PRE AX	ax	yes	3.5	0.6	top	full pelvis
T1 VIBE/LAVA	T1 FS PRE SAG	sag	yes	3.5	0.6	right	
Diffusion (b50, b800, ADC)	DIFFUSION AX	ax	yes	6	1	top	

Send the above sequences to PACS for a **body Radiologist check** to determine if IV contrast is needed. Some trauma and implant malfunction cases do not require 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	

If the exam is for **penile implant integrity/malfunction**, add the following sequences at the end of the exam after the patient has inflated his implant:

T2 TSE	T2 AX	ax	no	4	0.8	top	penis/scrotum
T2 TSE	T2 FS AX	ax	yes	4	0.8	top	

RECONS:

axial and sagittal subtractions