

MRI Uterus

Updated 07/05/25

Reviewed 07/05/25

Indications: cancers/masses/lesions of the uterus, endometrium, cervix & vagina; uterine fibroids and leiomyomas;
uterine adenomyosis; vaginal/uterine bleeding, pre/post menopausal uterine bleeding & dysfunctional uterine bleeding.

Use unisex protocol for ovarian cancers/masses/cysts, endometriosis & vulvar cancers.

US Gel: patient administers 30 mL US gel into vagina.

US gel **required** for cervix & vaginal indications.

US gel **not required** for uterine indications, fibroids.

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).

Mass FOV: centered on mass, FOV 13-15 cm, 320 x 256 matrix, cover several slices above and below mass.

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
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GLUCAGON - 1 mg slow IV push **just before** beginning imaging.

T2 HASTE/SSFSE	T2 COR	cor	no	7	1.4	front	full pelvis
T2 TSE	T2 SAG	sag	no	5	1	right	
T2 HASTE/SSFSE	T2 AX	ax	no	7	1.4	top	
T2 HASTE/SSFSE	T2 FS AX	ax	yes	7	1.4	top	

Send the above sequences to PACS for a **body Radiologist check** to localize the lesion and determine the oblique axial plane through the lesion (see axial oblique examples on next patient).

T2 TSE	T2 OBL AX	obl ax	no	3.5	0.5	top	uterus, cervix or vagina (depends on indication & lesion location)
Diffusion (b50, b1000, ADC)	DIFFUSION OBL AX	obl ax	yes	5	0	top	
T1 VIBE/LAVA	T1 FS PRE SAG	sag	yes	3.5	0.6	right	full pelvis
T1 VIBE/LAVA	T1 FS PRE OBL AX	obl ax	yes	3.5	0.6	top	

GLUCAGON - 1 mg slow IV push **just before** giving IV contrast.

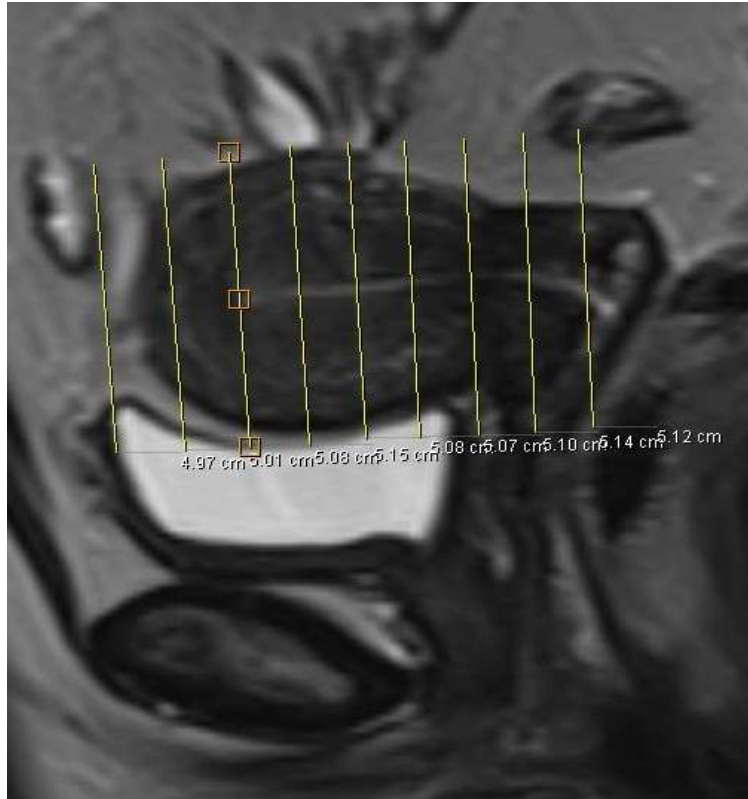
CONTRAST - 2 mL/sec standard dose gadolinium (0.2 mL/kg Clariscan or 0.1 mL/kg Gadavist) followed by 20 mL saline flush.

T1 VIBE/LAVA	T1 FS 35 SEC SAG	sag	yes	3.5	0.6	right	full pelvis
T1 VIBE/LAVA	T1 FS 60 SEC SAG	sag	yes	3.5	0.6	right	
T1 VIBE/LAVA	T1 FS 90 SEC OBL AX	obl ax	yes	3.5	0.6	top	
T1 VIBE/LAVA	T1 FS 120 SAG	sag	yes	3.5	0.6	right	
T1 VIBE/LAVA	T1 FS 4 MIN OBL AX	obl ax	yes	3.5	0.6	top	
T1 VIBE/LAVA	T1 FS 5 MIN AX	ax	yes	3.5	0.6	top	

RECONS:

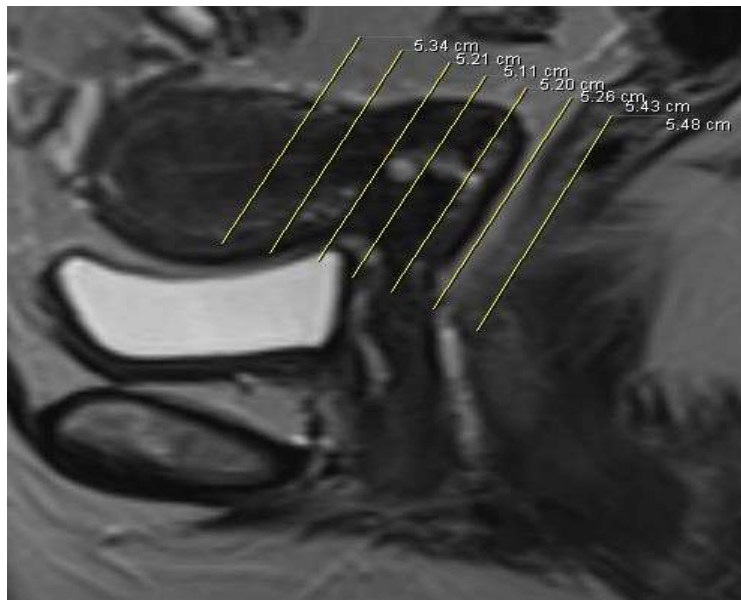
oblique axial and sagittal subtractions

MRI Uterus



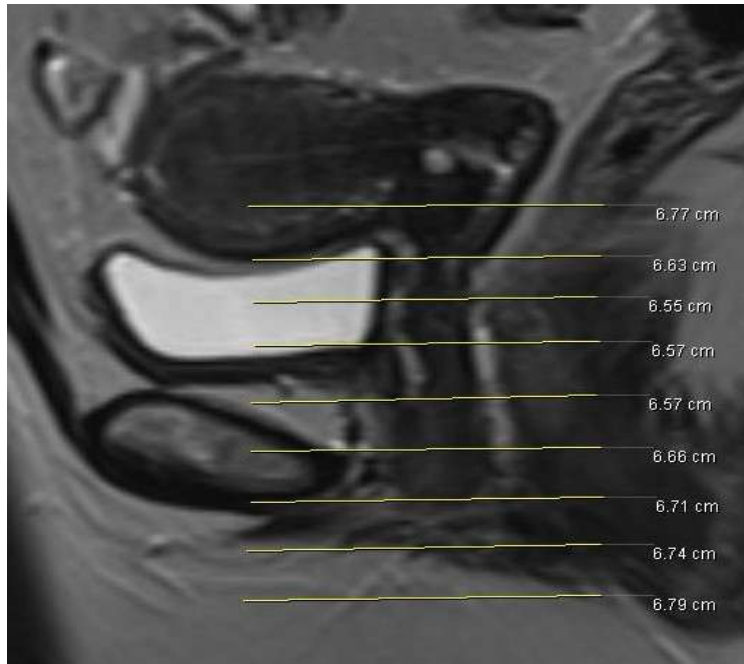
Uterine/Endometrial Lesions/Indications

Oblique axial angulation (perpendicular to the long axis of the endometrial canal in the sagittal plane)



Cervical Lesions/Indications

Oblique axial angulation (perpendicular to the long axis of the endocervical canal in the sagittal plane)



Vaginal Lesions/Indications

Oblique axial angulation (perpendicular to the long axis of the vagina in the sagittal plane)