

MRI MRCP

Updated 11/04/23

Reviewed 05/14/25

Indications: cholecystitis, gallstones, biliary dilatation, choledocholithiasis, jaundice, pancreatitis, RUQ/epigastric pain.

Have the patient drink 16 oz water (if not NPO) 10 mins prior to beginning exam to distend to the duodenum and allow better visualization of the ampulla.

Full Abdomen FOV: Lung bases to iliac crest or to bottom of liver/spleen/kidneys if they extend low (top/bottom coverage), anterior to posterior subq fat (front/back coverage), right to left subq fat (right/left coverage).

MRCP FOV: above central intrahepatic bile ducts to bottom of gallbladder/pancreas (top/bottom coverage), front of gallbladder to few slices posterior to pancreas (front/back coverage), right of gallbladder to left of pancreatic tail (right/left coverage).

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	MRCP THINS COR	cor	no	4	0.8	front	MRCP
T2 HASTE/SSFSE	MRCP THINS SAG	sag	no	4	0.8	right	
T2 HASTE/SSFSE	MRCP THINS AX	ax	no	4	0.8	top	
Radial Thick Slab	MRCP THICK SLAB	radial	yes	50	25	NA	
3D Slab MRCP	MRCP THIN SLAB	cor	yes	1	0	front	
T2 HASTE/SSFSE	T2 FS AX	ax	yes	7	1.4	top	full abdomen
T1 VIBE/LAVA	T1 FS PRE AX	ax	yes	3.5	0.6	top	
In/Out Phase w/ DIXON	IN/OUT AX	ax	no	5	1	top	
Diffusion (b50, b800, ADC)	DIFFUSION AX	ax	yes	7	1.4	top	

RECONS:

horizontal and vertical MIP spinners of the 3D MRCP sequence