Exercise 19: How to Compose an MR report

Teaching points

1) Learn about the different parts of an MR report.
2) Learn how to compose an MR report properly.

MR REPORT

A. Indications

- This needs to match the approved ICD9 diagnosis codes allowed for reimbursement. See http://icd9cm.chrisendres.com/.

B. Technique

- Start with the exact billing code wording
- Magnet manufacturer, field strength
- Coil used and positioning of coil
- List of sequences
- Gd injection details
- During Gd sequences
- Post Gd sequences
- Post-processing
- Discuss image quality and issues

C. Comparisons

- List any available comparison study (e.g. CT 3/13/09)
- If none are available, say "None"

D. Findings

- For each organ in the FOV, compose a paragraph addressing:
    - size and shape of organ
    - signal characteristics
    - any lesions: location and size of each lesion, features, enhancement characteristics
- Anomalies
- For any findings, indicate changes compared to prior study

E. Impression

- Give a brief summary of findings, one sentence.
- Give conclusions.
- Offer recommendations for additional imaging for follow-up. Be specific on the additional sequences that need to be done.
- State if the patient had reaction to the contrast.

LIVER

Indications

Reimbursable ICD9 Codes

570	Acute and subacute necrosis of liver
571	Chronic liver disease and cirrhosis
571.0	Alcoholic fatty liver
571.2	Alcoholic cirrhosis of liver
571.3	Alcoholic liver damage, unspecified
571.4	Chronic hepatitis
571.5	Cirrhosis of liver without mention of alcohol
571.6	Biliary cirrhosis
571.8	Other chronic nonalcoholic liver disease
571.9	Unspecified chronic liver disease without mention of alcohol
572	Liver abscess and sequelae of chronic liver disease
572.0	Abscess of liver
572.3	Portal hypertension
572.8	Other sequelae of chronic liver disease
573.0	Chronic passive congestion of the liver
573.1	Hepatitis in viral diseases classified elsewhere
573.2	Hepatitis in other infectious diseases classified elsewhere
573.3	Hepatitis, unspecified
573.4	Hepatic infarction
573.9	Unspecified disorder of liver
155.0	Primary malignant neoplasm
155.1	Malignant neoplasm of intrahepatic bile ducts
155.2	Liver, not specified as primary or secondary
211.5	Benign neoplasm
228.0	Hemangioma
239	Unspecified
197.7	Metastasis
789	Hepatomegaly
751.6	Congenital anomalies of liver
V42.7	Transplanted liver
V59.6	Liver Donor
195.2	Malignant Neoplasm of Abdomen

Findings

- Ascites: small, moderate, large, and massive
- Describe the size of liver and its lobe ratios; describe contour and the signal intensity on all sequences
- Indicate the location of the lesion including the lobe and segment number, describe the size of the biggest lesion, describe the enhancement characteristics
- Indicate fat fraction
- Describe the presence of dilatation in the biliary system; state the size of gallbladder, presence of stones, and inflammation.

- Describe the size and volume of the spleen, size of the pancreas, and describe if pancreatic duct is enlarged or atrophic; indicate if there's focal lesions identified
- Indicate if there's a mass seen on the adrenal glands
- Describe the size, contour, signal intensity of both kidneys; state the presence of collecting system dilatation and masses
- Tell if there's adenopathy seen in the retroperitoneum
- Describe the patency of the portal vein, SMV, SMA, splenic vein, and hepatic veins

Template

Re:
Exam: MRI of abdomen with and without contrast
Exam Date:

Clinical Statement:

Technique: 1.5 Tesla, phased array coil, coronal SSFSE, axial T1 in phase and out of phase breath-hold SPGR, axial T2 SSFSE, dynamic gadolinium-enhanced axial 3D gradient echo with fat saturation and post gadolinium coronal T2 gradient echo with fat saturation.

Images were reviewed and reconstructed on a computer workstation.

Findings:

Ascites:
Liver: size, contour and signal intensity, focal lesions, fat fraction
Biliary: dilatation
Gall Bladder: size and configuration, presence of cholelithiasis or inflammation
Spleen: size and signal, focal lesions
Pancreas: size and contour, signal intensity, focal lesions
Pancreatic duct: enlarged or atrophic
Adrenal Glands: masses identified
Right Kidney: size, contour, signal intensity; pelvicaliceal dilatation, masses identified
Left Kidney: size, contour, signal intensity; pelvicaliceal dilatation, masses identified
Retroperitoneum: presence of adenopathy
Vessels: The portal vein, SMV, SMA, splenic vein, and hepatic veins are patent.

Impression:

SAMPLE

Re:

Exam: MRI of Abdomen with and without contrast

Exam Date:

Clinical Statement:

Technique: 1.5 Tesla, phased array coil, coronal SSFSE, axial T1 in phase and out of phase breath-hold SPGR, axial T2 SSFSE, dynamic gadolinium-enhanced axial 3D gradient echo with fat saturation and post gadolinium coronal T2 gradient echo with fat saturation.

Images were reviewed and reconstructed on a computer workstation.

Findings:

Ascites: There is no abdominal ascites.

Liver: There is a 6.6 cm x 5.4 cm x 5.7 cm heterogeneously enhancing mass in segment 5 with a capsule that enhances on delayed images. The enhancing components blend with liver parenchyma on delayed images.

Biliary ducts: There is no intra or extrahepatic biliary dilatation.

Gall Bladder: Normal in size and configuration. There is no evidence of cholelithiasis and inflammation.

Spleen: The spleen is normal in size, measuring 10.8 cm in longitudinal axis. It has a normal signal with no focal lesions identified.

Pancreas and duct: The pancreas is normal in signal. The pancreatic duct is normal in caliber.

Adrenal Glands: There are no adrenal nodules.

Kidneys: The kidneys enhance symmetrically without hydronephrosis or mass.

Retroperitoneum: There is no retroperitoneal adenopathy.

Vessels: The portal vein, superior mesenteric vein, splenic vein and hepatic veins are patent. Superior mesenteric artery and hepatic artery are patent. Abdominal aorta is normal in course and caliber.

Impression: Normal MR of liver; no lesion identified.

I. NON-CONTRAST ENHANCED RENAL MRA

Indications

Reimbursable ICD9 Codes

403	Atherosclerosis
440.1	Renal Artery Stenosis
447.4	Celiac Stenosis
447.9	Arterial Disease
444.0	Arterial Embolism
593.2	Renal Cyst
593.9	Renal Mass
441.0	Aortic Dissection
441.4	Abdominal Aortic Aneurysm
442.1	Renal Artery Aneurysm
401.9	Hypertension

447.3	Fibromuscular Dyslplasia
593.81	Renal Vein Thrombosis

Findings

- Describe the abdominal aorta, superior and inferior mesenteric artery, and celiac axis; indicate if it's seen and the presence of narrowing or any significant atherosclerotic disease
- Measure the length of the left and right kidney; indicate if renal mass is seen
- Describe the stenoses seen on the right and left renal artery; indicate location and severity
- Describe the right common iliac artery, right external iliac artery, and right internal iliac artery
- Describe the left common iliac artery, left external iliac artery, and left internal iliac artery
- Indicate if there's abdominal masses or retroperitoneal adenopathy identified
- Arterial signal dephasing on 3D PC

Template

Re:
Exam: Non-Contrast Enhanced Renal MRA
Exam Date:

Clinical Statement:

Technique: 1.5 Tesla, cardiac coil, 2D, 3D, and CINE Phase Contrast, 2D and 3D Time of Flight, 2D and 3D fat sat FIESTA, 3D FSE, and 2D Double Inversion Recovery.

The image data was reconstructed on a computer workstation to obtain reformations and MIPs of the major vessels.

Findings:

Abdominal aorta: normal, narrowing, not seen
Celiac axis: normal, narrowing, not seen
SMA: normal, narrowing, not seen
IMA: normal, narrowing, not seen

The right kidney measures __ cm in length. No right renal masses are identified.
There is a single right renal artery which is ___.
The left kidney measures __ cm in length. No left renal masses are identified.
There is a single left renal artery which is ___.

Right common iliac artery: normal, narrowing, not seen
Right external iliac artery: normal, narrowing, not seen
Right internal iliac artery: normal, narrowing, not seen
Left common iliac artery: normal, narrowing, not seen
Left external iliac artery: normal, narrowing, not seen
Left internal iliac artery: normal, narrowing, not seen

No abdominal masses or retroperitoneal adenopathy is identified.

Impression:

Re:
Exam: Non-Contrast Enhanced Renal MRA
Exam Date:

Clinical Statement:

Technique: 1.5 Tesla, cardiac coil, 2D, 3D, and CINE Phase Contrast, 2D and 3D Time of Flight, 2D and 3D fat sat FIESTA, 3D FSE, and 2D Double Inversion Recovery.

The image data was reconstructed on a computer workstation to obtain reformations and MIPs of the major vessels.

Findings:

Abdominal aorta:	normal
Celiac axis:	mild proximal narrowing
SMA:	normal
IMA:	not seen

The right kidney measure 12.3 cm in length. No right renal masses are identified. There is a single right renal artery which is which patulous in its mid-segment consistent with the vein patch surgery. There is mild narrowing at the ends of the vein patch but no evidence of hemodynamically significant recurrent stenosis.

The left kidney measures 13.1 cm in length. No left renal masses are identified. There is a single left renal artery which is widely patent.

Both kidneys enhance symmetrically with normal cortico-medullary differentiation.

Right common iliac artery:	normal
Right external iliac artery:	normal
Right internal iliac artery:	normal
Left common iliac artery:	normal
Left external iliac artery:	normal
Left internal iliac artery:	normal

No abdominal masses or retroperitoneal adenopathy is identified.

Impression: Right renal artery vein patch and widely patent left renal artery with normal kidney size and symmetrical enhancement.

II. FEMALE PELVIS

Indications

Reimbursable ICD9 Codes

179	Malignant neoplasm of uterus, part unspecified
180.0-180.9	Malignant neoplasm of cervix uteri
181	Malignant neoplasm of placenta
182.0-182.8	Malignant neoplasm of body of uterus
183.0-183.6	Malignant neoplasm of ovary and other uterine adnexa
218.0-218.9	Benign neoplasm, uterine leiomyoma
219.0-219.9	Other benign neoplasm of ovary
220	Benign neoplasm of ovary
236.0	Carcinoma of uterus
625.9	Pelvic pain
628.9	Infertility
752.3	Uterine anomaly
617.0	Adenomyosis
625.8	Uterine mass

Findings

- Describe the uterus, size, orientation, septate and septate thickness measurement, and indicate the presence of leiomyoma or mass
- Describe the endometrium, size, and indicate the presence of adenomyosis, signal intensity
- Describe the left and right ovaries, size, signal intensity
- Presence of fluid in the cul de sac
- Pelvic mass identified
- Describe the partially visualized lumbo-sacral spine and the sciatic nerves

Template

Re:
Exam: Pelvic MRI
Exam Date:

Clinical Statement:
The patient is on day _____ of her menstrual cycle.

Technique: 1.5 Tesla, Large field-of-view Coronal SSFSE in body coil, and Axial T1, Sagittal T2, Axial-to-uterus T2 and Coronal to uterus T2 using torso coil

Images were reviewed and reconstructed on a computer workstation.

Findings:

Uterus: The uterus has a normal appearance measuring ___x___x___cm. No uterine leiomyoma or other masses are identified. The endometrium measures _____ in thickness; there is no evidence of adenomyosis.

Right Ovary: Normal right ovary is identified, measuring ___x___x___ cm. (No, trace ____) Free fluid is identified in the cul de sac. No pelvic mass is identified.

Left Ovary: Normal left ovary is identified, measuring ___x___x___ cm. (No, trace ____) Free fluid is identified in the cul de sac. No pelvic mass is identified.

Spine: Although the technique is not optimal to evaluate the lumbo-sacral spine, no abnormality of L4-5, L5-S1, or the rest of the sacrum is identified. Normal sciatic nerves are identified in the sciatic notch bilaterally.

Impression:

SAMPLE

Patient Name:
Exam: Pelvic MRI
Exam Date:

Clinical Statement:
The patient is on day 16 of her menstrual cycle.

Technique: 1.5 Tesla, large FOV coronal SSFSE in body coil, Axial T1, Sagittal T2, Axial-to-uterus T2 and Coronal to uterus T2 using torso coil

Images were reviewed and reconstructed on a computer workstation.

Findings:

Uterus: 8.6 x 5.8 x 7.7cm, antiflexed, septate with septate thickness measuring 3.7cm from external surface of fundus to endometrium. Adenomyosis with focal areas of myometrial low signal on T2 representing fibroids and/or adenomyomata, the largest measuring 2.1 x 2.0cm. The uterine septum, which is primarily myometrial tissue without a significant fibrous component, is involved with a probable fibroid.

Right ovary: 3.4 x 4.4 x 3.4 cm associated with a small amount of free fluid posteriorly which extends into the cul-de-sac. Within the ovary there is a suggestion of an involuting cyst which measures approximately 1 x 1.5. There is generalized hyperintensity of the ovary suggestive of stromal edema

Left ovary: 4.8 x 1.8 x 3.5cm; Incidentally noted a focal area of bony sclerosis involving the right sacrum probably represents a benign bone island.

Spine: Although the technique is not optimal to evaluate the lumbo-sacral spine, no abnormality of L4-5, L5-S1, or the rest of the sacrum is identified. Normal sciatic nerves are identified in the sciatic notch bilaterally.

Impression: Septate uterus
Adenomyosis
Uterine fibroids

III. PERIPHERAL MRA

Indications

Reimbursable ICD9 Codes

440.20	Atherosclerosis of native arteries of the extremities	
	440.21	With claudication
	440.22	With rest pain
	440.23	Ulceration
	440.24	With gangrene
440.3	Atherosclerosis of bypass graft of extremities	
996.74	Thromboembolism of graft	
442.2	Aneurysm of iliac artery	
442.3	Aneurysm of artery of lower extremity	
443	Other peripheral vascular diseases	
443.1	Thromboangitis obliterans	
443.22	Dissection of iliac artery	
443.9	Peripheral vascular diseases (unspecified)	
444	Arterial embolism/thrombosis	
	444.22	of lower extremity
	444.81	of iliac artery
445.02	Atheroembolism of lower extremity	
447.0	Acquired arteriovenous aneurysm or fistula	
447.60	Congenital arteriovenous aneurysm or fistula	
900.0-904.9	Traumatic arteriovenous aneurysm or fistula	
447.1	Stenosis	
747.6	Lower limb vessel anomaly (congenital)	

Findings

- Indicate if there's narrowing of the vessel; describe whether it's mild, moderate, or severe; length of occlusion
- Indicate if the vessel is widely patent
- Presence of abnormal masses
- Presence of degenerative changes in the spine, and describe the disc spaces

Template

Re:
Exam: MRA of abdomen, pelvis and both lower extremities
Exam Date:

Clinical Statement:

Technique: 1.5 Tesla, body and head coils, Trifucation: Sagittal T1 and coronal 2D MRA with 7ml Gd, Ankle-foot: coronal T1 and sagittal 2D projection MRA with 7ml Gd , Sagittal T1 abdomen and pelvis, 3D bolus chase: 4 stations - diaphragm to ankle: 47 ml Gd, 3D phase contrast MRA of renal arteries post gadolinium, 2D cine phase contrast flow of aorta and CFA.

3D images were reconstructed on computer workstation.

Findings:

- Abdominal Aorta:
- Celiac axis:
- SMA:
- IMA:
- Right renal artery:
- Left renal artery:
- Right Pelvis
  - Common iliac artery:
  - Internal Iliac artery:
  - External iliac artery:
- Right Thigh
  - Common femoral artery:
  - Profunda femoral artery:
  - Superficial femoral artery:
- Right Knee-calf
  - Popliteal artery:
  - Tibio-peroneal trunk:
  - Anterior tibial artery:
  - Posterior tibial artery:
  - Peroneal artery:
- Right Foot-ankle
  - Dorsalis pedis:
  - Posterior tibial:
  - Plantar arch:
- Left Pelvis
  - Common iliac artery:
  - Internal Iliac artery:
  - External iliac artery:
- Left Thigh
  - Common femoral artery:
  - Profunda femoral artery:
  - Superficial femoral artery:
- Left Knee-calf
  - Popliteal artery:
  - Tibio-peroneal trunk:
  - Anterior tibial artery:
  - Posterior tibial artery:
  - Peroneal artery:
- Left Foot-ankle
  - Dorsalis pedis:
  - Posterior tibial:
  - Plantar arch:

No abnormal masses are identified; however this study was not optimized to evaluate abdominal and pelvic organs or soft tissues.

Impression: Normal Pelvic MRI

SAMPLE

Patient Name:
Exam: MRA of abdomen, pelvis and both lower extremities
Exam Date:

Clinical Statement:

Technique: 1.5 Tesla, body and head coils, Trifucation: Sagittal T1 and coronal 2D MRA with 7ml Gd, Ankle-foot: coronal T1 and sagittal 2D projection MRA with 7ml Gd , Sagittal T1 abdomen and pelvis, 3D bolus chase: 4 stations - diaphragm to ankle: 47 ml Gd, 3D phase contrast MRA of renal arteries post gadolinium, 2D cine phase contrast flow of aorta and CFA.

3D images were reconstructed on computer workstation.

Findings:

Abdominal Aorta: mild narrowing distally
Celiac axis: origin off the edge of the film
SMA: widely patent
IMA: small but patent
Right renal artery: single, widely patent
Left renal artery: single, widely patent
Right Pelvis
Common iliac artery: mild narrowing
Internal Iliac artery: widely patent origin
External iliac artery: widely patent

Right Thigh
Common femoral artery: widely patent
Profunda femoral artery: widely patent
Superficial femoral artery: mild disease

Right Knee-calf
Popliteal artery: minimal disease
Tibio-peroneal trunk: widely patent
Anterior tibial artery: widely patent into foot
Posterior tibial artery: widely patent into foot
Peroneal artery: widely patent to ankle

Left Pelvis
Common iliac artery: mild narrowing
Internal Iliac artery: widely patent origin
External iliac artery: widely patent

Left Thigh
Common femoral artery: widely patent
Profunda femoral artery: widely patent
Superficial femoral artery: 5cm long occlusion at adductor canal

Left Knee-calf
Popliteal artery: minimal disease
Tibio-peroneal trunk: widely patent
Anterior tibial artery: widely patent into foot
Posterior tibial artery: widely patent into foot

Peroneal artery: widely patent to ankle

No abnormal masses were identified; however this study was not optimized to evaluate abdominal and pelvic organs or soft tissues. There are degenerative changes in the lumbar spine at multiple levels with complete collapse of the L4-5 intervertebral disc space.

Impression: Left SFA focal occlusion at adductor canal with 3 vessel run-off.

IV. PERFORATOR ANGIOGRAPHY FLAP

Indications

Reimbursable ICD9 Codes

174	Malignant neoplasm of female breast
174.8	Other specified sites of female breast
217	Benign neoplasm of breast
611.0	Inflammatory disease of breast
611.1	Hypertrophy of breast
611.3	Fat necrosis of breast
611.4	Atrophy of breast
611.8	Other specified disorders of breast
611.81	Ptosis of breast
611.82	Hypoplasia of breast
611.89	Other specified disorders of breast
612.0	Deformity of reconstructed breast
612.1	Disproportion of reconstructed breast
757.6	Specified anomalies of breast
996.54	Due to breast prosthesis
V50.1	Other plastic surgery for unacceptable cosmetic appearance
V51.0	Encounter for breast reconstruction following mastectomy
V52.4	Breast prosthesis and implant

Findings

- Describe the visualized portions of the liver, spleen, pancreas, and kidneys
- Indicate if there's biliary obstruction and presence of retroperitoneal lymphadenopathy
- Describe the uterus, measure the endometrial stripe
- Describe the ovaries, indicate size, presence of cyst
- Presence of trace free fluid in the pelvis
- Indicate if both the Right and Left Deep Inferior Epigastric Arteries are widely patent
- Indicate the series number and the image number where the umbilicus, gluteal crease, symphysis pubis are seen
- Describe the right and left abdominal muscle perforators, right and left gluteal muscle perforators, and the gracilis muscle perforators in terms of: perforator number, image location (series number, image number, distance of perforator to right or left of umbilicus/gluteal crease/symphysis pubis, distance of perforator superior or inferior to umbilicus/gluteal crease/symphysis pubis, vessel diameter

Template

Name:
MRN:

Clinical History: Undergoing breast reconstruction post mastectomy. Evaluate perforating arteries through rectus abdominis muscles.

Technique: MRA of the abdomen and pelvis with and without contrast was performed at 1.5Tesla using body coil. Initially the patient was positioned prone for the following sequences: axial and coronal single shot fast spin echo, axial high resolution 3D LAVA pre during post dynamic injection of 10ml gadofosveset trisodium (preceded by 0.5mg glucagon to reduce peristaliss) using Smart Prep, post Gd coronal and sagittal 3D LAVA. The patient was then repositioned supine on the MR scanner table and imaged again with high resolution 3D LAVA in axial, coronal and sagittal plane. 3D images were post-processed on a computer workstation.

Findings:

Ascites:
Liver: size, contour and signal intensity, focal lesions, fat fraction
Portal Vein: patency
Hepatic Veins: patency
Biliary: dilatation
Gall Bladder: size and configuration, presence of cholelithiasis or inflammation
Spleen: size and signal, focal lesions
Pancreas: size and contour, signal intensity, focal lesions
Pancreatic duct: enlarged or atrophic
Adrenal Glands: masses identified
Right Kidney: size, contour, signal intensity; pelvicaliceal dilatation, masses identified
Left Kidney: size, contour, signal intensity; pelvicaliceal dilatation, masses identified
Retroperitoneum: presence of adenopathy

Umbilicus/Gluteal Crease/Symphysis Pubis (U/GC/SP) location: Series number, Image number

Right Abdominal/Gluteal/Gracilis Muscle Perforators:
Perforator Image location Distance to U/GC/SP (mm) Distance right of U/GC/SP (mm) Vessel Diameter(mm)

Left Right Abdominal/Gluteal/Gracilis Muscle Perforators:
Perforator Image location Distance to U/GC/SP (mm) Distance right of U/GC/SP (mm) Vessel Diameter(mm)

Impression:

SAMPLE
Name:
MRN:

Clinical History: Undergoing breast reconstruction post mastectomy. Evaluate perforating arteries through rectus abdominis muscles.

Technique: MRA of the abdomen and pelvis with and without contrast was performed at 1.5Tesla using cardiac coil. Initially the patient was positioned prone for the following sequences: axial and coronal single shot fast spin echo, axial high resolution 3D LAVA pre during post dynamic injection of 10ml gadofosveset trisodium using Smart Prep, post Gd coronal and sagittal 3D LAVA. The patient was then repositioned supine on the MR scanner table and imaged again with high resolution 3D LAVA in axial, coronal and sagittal plane. 3D images were post-processed on a computer workstation.

Findings:
Visualized portions of liver, spleen, pancreas, and kidneys are unremarkable. There is no biliary obstruction and no retroperitoneal lymphadenopathy seen.

In the pelvis, uterus is identified with a 2mm endometrial stripe. The junctional zone is not well seen on T2 but appears normal post gadolinium. Ovaries are not identified and may be atrophic. Trace free fluid is identified in the pelvis. No lymphadenopathy.

Both the Right and Left Inferior Epigastric Arteries are widely patent.

Umbilicus location: (Se10 Im 34)
Right Abdomen Muscle Perforators:

Perforator	Image location	Distance to umbilicus(mm)	Distance right of umbilicus(mm)	Vessel Diameter(mm)
R1	Se10, Im55	31 inferior to U	31	1.1

R1 branches to R1a (0.9mm) and R1b (1.4mm) at 41 mm to the right of the umbilicus.

Left Abdomen Muscle Perforator:

Perforator	Image location	Distance to umbilicus(mm)	Distance left of umbilicus(mm)	Vessel Diameter(mm)
L1	Se10, Im34	5 superior to U	53	1.1
L2	Se10, Im38	6 inferior to U	23	1.3

Impression:
Multiple perforating arteries through the rectus abdominis muscles as described.

V. APPENDICITIS IN PREGNANCY

Indications

Reimbursable ICD9 Codes

540	Appendicitis
540.0	Appendicitis, acute with generalized peritonitis
540.9	Appendicitis, acute without peritonitis
541	Appendicitis, unqualified
542	Other appendicitis
543	Other diseases of appendix

Findings

- Ascites: small, moderate, large, and massive
- Describe the size of liver and its lobe ratios; describe contour and the signal intensity on all sequences
- Indicate the location of the lesion including the lobe and segment number, describe the size of the biggest lesion, describe the enhancement characteristics
- Indicate fat fraction
- Describe the presence of dilatation in the biliary system; state the size of gallbladder, presence of stones, and inflammation.
- Describe the size and volume of the spleen, size of the pancreas, and describe if pancreatic duct is enlarged or atrophic; indicate if there's focal lesions identified
- Indicate if there's a mass seen on the adrenal glands
- Describe the size, contour, signal intensity of both kidneys; state the presence of collecting system dilatation and masses
- Tell if there's adenopathy seen in the retroperitoneum
- Describe the patency of the portal vein, SMV, SMA, splenic vein, and hepatic veins
- Describe the uterus, size, orientation, septate and septate thickness measurement, and indicate the presence of leiomyoma or mass
- Describe the endometrium, size, and indicate the presence of adenomyosis, signal intensity
- Describe the placenta
- Describe the cervix, vagina, and bowel
- Indicate the fetal presentation within the uterus
- Describe the left and right ovaries, size, signal intensity
- Presence of free fluid
- Describe the appendix: shape and size; presence of Inflammation and indicate if its mild, moderate, or severe
- Fluid collection or bowel obstruction noted

Template

Re:
Exam: MR Abdomen and Pelvis without Contrast
Exam Date:

Clinical Statement:

History: Indicate if the patient is in her first/second/third trimester

Technique: 1.5 Tesla, body array coil, Magnetic resonance imaging of the abdomen/pelvis was performed using multi-echo, multiplanar technique without the administration of gadolinium. Coronal and axial T2 SSFSE, coronal and axial 2D FIESTA with fatsat, Axial and sagittal T2 SSFSE with breathold sequences were obtained.

Findings:

Ascites:
Liver: size, contour and signal intensity, focal lesions, fat fraction
Biliary: dilatation
Gall Bladder: size and configuration, presence of cholelithiasis or inflammation
Spleen: size and signal, focal lesions
Pancreas: size and contour, signal intensity, focal lesions
Pancreatic duct: enlarged or atrophic
Adrenal Glands: masses identified
Right Kidney: size, contour, signal intensity; pelvicaliceal dilatation, masses identified
Left Kidney: size, contour, signal intensity; pelvicaliceal dilatation, masses identified
Retroperitoneum: presence of adenopathy
Vessels: The portal vein, SMV, SMA, splenic vein, and hepatic veins are patent.

Amniotic fluid: volume
Uterus: describe uterine contour, signal intensity, presence of mass
Placenta: location, placental thickness, signal intensity and location of placental cord insertion site
Cervix: describe cervical architecture
Fetal presentation: fetal presentation within the uterus
Ovaries: size, presence of free fluid in the cul de sac, pelvic mass identified
Vagina: describe contour, signal intensity, presence of mass
Bowel: describe contour, signal intensity, presence of mass
Fetal structures: Describe appearance of the fetal structures visualized --Brain, spine, lungs, cardiac position, stomach, liver, gallbladder, small bowel, kidneys, urinary bladder, the umbilical cord insertion site and orbits
Free Fluid: Presence of free fluid
Appendix: Size, shape, indicate series and image number where appendix is seen; presence of inflammation

Impression:

SAMPLE

Re:

Exam: MR Abdomen and Pelvis w/o contrast

Exam Date:

Clinical Statement:

History: Right lower quadrant pain in a 2nd trimester pregnant female.

Technique: 1.5 Tesla, phased array coil, 3 plane SSFSE localizer, coronal, sagittal, and axial SSFSE through the gravid uterus, Axial T1 of abdomen and pelvis, axial T1 SPGR through the uterus.

Findings:

Ascites: There is no abdominal ascites.

Liver: The liver is normal in size, contour, and has normal signal intensity on all sequences. No focal hepatic lesions are identified.

Biliary ducts: There is no intra or extrahepatic biliary dilatation.

Gall Bladder: Normal in size and configuration. There is no evidence of cholelithiasis and inflammation.

Spleen: The spleen is normal in size, measuring 10.8 cm in longitudinal axis. It has a normal signal with no focal lesions identified.

Pancreas and duct: The pancreas is normal in signal. The pancreatic duct is normal in caliber.

Adrenal Glands: There are no adrenal nodules.

Kidneys: There is mild fullness of the maternal right urinary collecting system.

Retroperitoneum: There is no retroperitoneal adenopathy.

Vessels: The portal vein, superior mesenteric vein, splenic vein and hepatic veins are patent. Superior mesenteric artery and hepatic artery are patent. Abdominal aorta is normal in course and caliber.

Amniotic fluid: Amniotic fluid volume appears subjectively normal.

Uterus: The overall uterine contour is normal.

Placenta: The placenta is anterior and not previa in location. It has a normal thickness. It is relatively homogeneous in signal intensity and appears normal. The placental cord insertion site is central.

Cervix: The cervical architecture is normal.

Fetus: The fetus is in cephalic presentation.

Ovaries: The ovaries are normal.

Vagina: The vagina is normal.

Bowel: The bowel is normal.

Fetal structures: Fetal structures visualized that appear normal include: Brain, spine, lungs, cardiac position, stomach, liver, gallbladder, small bowel, kidneys, urinary bladder, the umbilical cord insertion site and orbits.

Free Fluid: There is no free fluid

Appendix: A blind-ending, dilated tubular structure in the right lower quadrant (images 9:6, 4:13, and 8:45), measuring up to 10 mm, is identified with minimal surrounding inflammatory changes. Findings suggestive of early appendicitis. No evidence of fluid collection or bowel obstruction is noted.

Impression: A blind-ending, dilated tubular structure in the right lower quadrant (images 9:6, 4:13, and 8:45), measuring up to 10 mm, is identified with minimal surrounding inflammatory changes. Findings suggestive of early appendicitis. No evidence of fluid collection or bowel obstruction is noted.

Anterior fundal placenta without evidence for previa. Presently the uterus appears homogeneous without marked increased vascularity. There is no suggestion for placenta accreta at the present time.