Radiology of the ABDOMEN, PELVIS AND PERINEUM
PLAIN X-RAY of the ABDOMEN and PELVIS (KUB)
GASTRIC ANTRUM: is very anterior

Layers of peritoneum attaches greater curvature to transverse colon and contains fat
The transverse and proximal sigmoid colons are very anterior.
ON A SUPINE FILM, GAS WILL RISE TO THE LEAST DEPENDENT POINTS (i.e. ANTERIOR STRUCTURES)
LEFT HAND RULE:
PLACE LEFT HAND ON RIGHT HIP

FUNDUS
BODY
ANTRUM
DUODENUM
fundus

body

duodenum

antum

duodenum
SAME PATIENT WHICH IS PRONE AND WHICH IS SUPINE?

PRONE
SUPINE
Double layer of peritoneum that suspends intestines from posterior abdominal wall (contains fat, vessels)
BARIUM ENEMA

CECUM

ASCENDING COLON

TRANSVERSE COLON

DESCENDING COLON

SIGMOID COLON

RECTUM
ANGIOGRAPHIC ANATOMY OF THE ABDOMEN
NORMAL AORTOGRAM (SAGITTAL)

CELIAC AXIS

SUPERIOR MESENTERIC ARTERY (SMA)
NORMAL AORTOGRAM (FRONTAL)
HEPATIC ARTERY
SPLENIC ARTERY
RIGHT RENAL ARTERY
LEFT RENAL ARTERY
CELIAC ARTERIOGRAM (ARTERIAL)

MAIN HEPATIC A.

GASTRODUODENAL ARTERY

HEPATIC PROPER ARTERY

LEFT GASTRIC A

SPLENIC ARTERY
PANCREAS AND STOMACH CUT

IVC

PORTAL VEIN

SPLENIC VEIN

INFERIOR MESENTERIC VEIN

SUPERIOR MESENTERIC VEIN
CELIAC ARTERIOGRAM
(VENOUS PHASE)

SPLENIC VEIN
PORTAL VEIN
SPLEEN
SMA

Jejunal and ileal branches (left side); 15-18 arteries form loops (vasa recta)

Middle colic, ileocolic, and right colic branches (right side)
SUPERIOR MESENTERIC VEIN RUNS TO THE RIGHT OF THE SUPERIOR MESENTERIC ARTERY
PORTAL VEIN

SPLENIC VEIN

IMV

SMV

SMA

PORTAL VEIN IS FORMED WHEN THE SPLENIC VEIN JOINS SUPERIOR MESENTERIC VEIN
IMA
LEFT COLIC ARTERY
SIGMOID ARTERIES
SUPERIOR RECTAL ARTERY
INFERIOR MESENTERIC ARTERIOGRAM

IMA
LEFT COLIC ARTERY
SUPERIOR RECTAL ARTERY

CATHETER IN THE IMA
CT ANATOMY
CUT 1. ABOVE CELIAC AXIS
ON ALL SCANS IDENTIFY:

- Stomach
- Liver
- Aorta
- Inferior Vena Cava
- Right Kidney
- Left Kidney
- Spleen
PORTAL VEIN RUNS ALONG THE VENTRAL SURFACE OF THE INFERIOR VENA CAVA
DIAPHRAGMATIC CRURA

FIBROUS ATTACHMENT OF THE DIAPHRAGM
CUT 2. TOP OF THE CELIAC AXIS
HEPATIC ARTERY runs along the ventral surface of the portal vein.
CUT 3. THROUGH THE CELIAC AXIS

CELIAC AXIS IS THE FIRST MAJOR BRANCH OFF OF THE AORTA
CUT 4. BETWEEN THE CELIAC AND SMA
SPLENIC VEIN RUNS ALONG THE DORSAL SURFACE OF THE PANCREAS
CUT 5. SMV AND SPLENIC FORM PORTAL V
Superior mesenteric artery is the second major branch of the abdominal aorta.
CUT 6. ALONG LEFT RENAL VEIN
LEFT RENAL VEIN RUNS BETWEEN AORTA AND SUPERIOR MESENTERIC ARTERY
CUT 7. THROUGH PANCREATIC HEAD

PANCREATIC HEAD LIES MEDIAL TO THE DUODENUM AND TO THE RIGHT OF THE SMV
ANGIOGRAPHIC ANATOMY OF THE PELVIS
CT ANATOMY OF THE PELVIS
SAGITAL MALE PELVIS
Round ligaments
anterior suspensory ligaments of the uterus
course lateral to the deep inferior epigastric vessels to enter the inguinal canal
AORTA
SPLENIC ARTERY
SPLENIC VEIN
PORTAL VEIN
AORTA
SMA
SMV
PORTAL VEIN
AORTA
LEFT RENAL ART
LEFT RENAL VEIN
IVC