

Etiologies:

Small Bowel Obstruction	Large Bowel Obstruction	Abdominal Distention
<ul style="list-style-type: none"> -adhesions: <ul style="list-style-type: none"> -from prior surgery -post inflammation -congenital (Meckel's Diverticulum) -neoplasms <ul style="list-style-type: none"> -primary small bowel neoplasm -secondary small bowel cancer -local invasion by intra-abdominal malignancy -carcinomatosis -hernias: <ul style="list-style-type: none"> -external -internal -incarcerated -inflammation: <ul style="list-style-type: none"> -Crohn's Disease -Inflammatory Bowel Disease -radiation-induced stricture -postischemic stricture -intraluminal: <ul style="list-style-type: none"> -volvulus -intussusception -congenital abnormalities <ul style="list-style-type: none"> -Atresia -Web -Meckel's Diverticulum -other <ul style="list-style-type: none"> -paralytic ileus (can be postoperative, narcotics, trauma, bed rest, hypothyroidism, electrolyte deficiencies, anesthesia, psychotropic medication, systemic or inflammatory illness, due to hypothyroid, hypokalemia, etc.) -foreign body -gallstone ileus -diverticulitis -endometriosis -hematoma 	<ul style="list-style-type: none"> -neoplasms: <ul style="list-style-type: none"> -primary small bowel neoplasm -secondary (metastatic lesion) to small bowel -local invasion by intra-abdominal malignancy -rectal cancer -inflammation: <ul style="list-style-type: none"> -Inflammatory Bowel Disease -congenital: <ul style="list-style-type: none"> -Hirschsprung's Disease -imperforate anus -other: <ul style="list-style-type: none"> -colonic ileus -diverticulitis -volvulus (cecal, sigmoid, transverse colon) -colonic pseudoobstruction (can be congenital) -ischemic bowel -dysmotility 	<ul style="list-style-type: none"> -ascites due to: <ul style="list-style-type: none"> -cirrhosis -congestive heart failure -pancreatitis -serositis -peritonitis/infection -peritoneal carcinomatosis -bowel dilation due to: <ul style="list-style-type: none"> -mechanical problem (adhesions, volvulus, malignancy, intussusception, constipation) -pseudoobstruction (toxic megacolon, Ogilvie Syndrome, paralytic ileus, etc.) -neoplasms: <ul style="list-style-type: none"> -retroperitoneal tumors -ovarian neoplasms -other: <ul style="list-style-type: none"> -pelvic mass (due to pregnancy, bladder, fibroids) -flatus -Inflammatory Bowel Disease

Adhesive SBO:

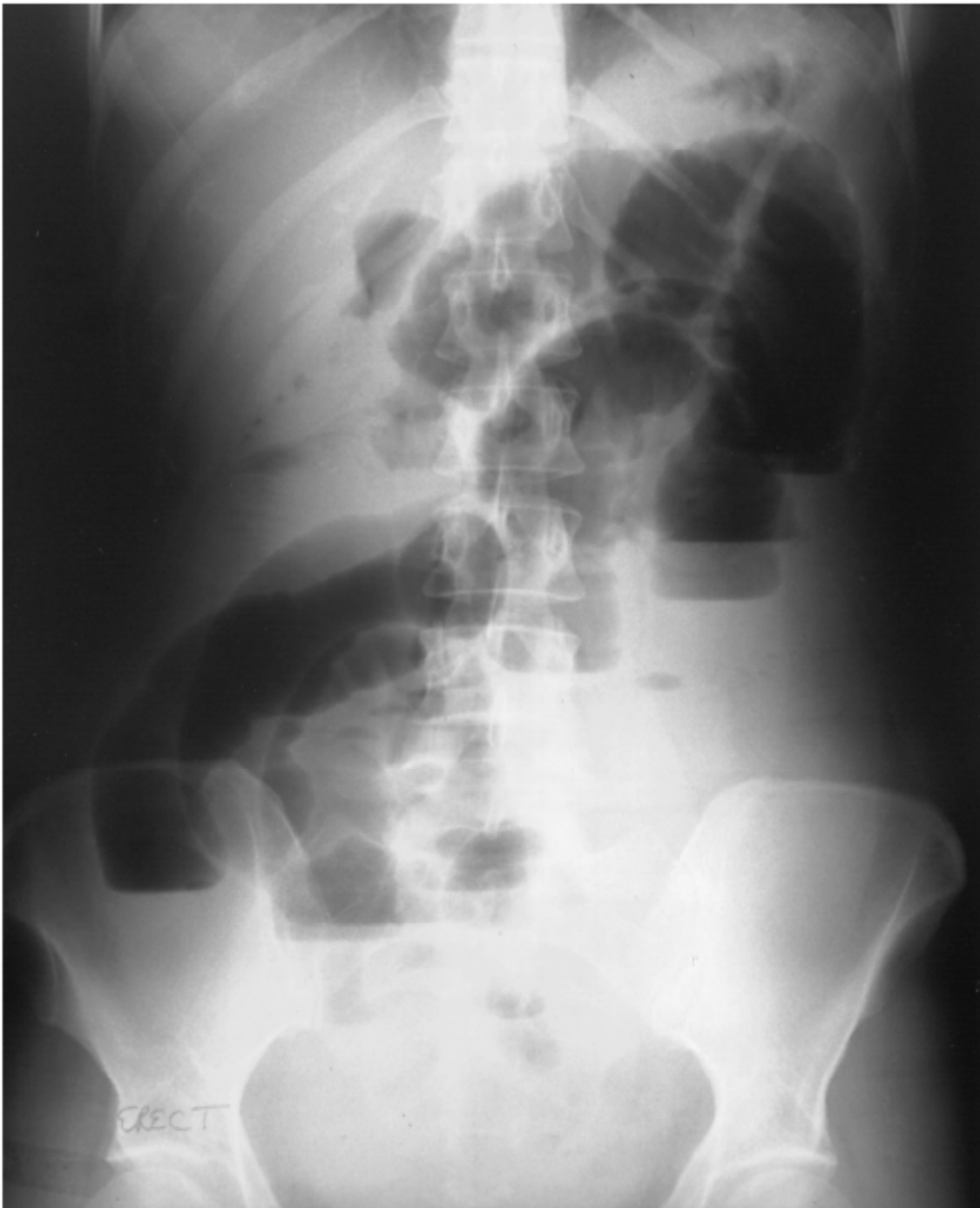
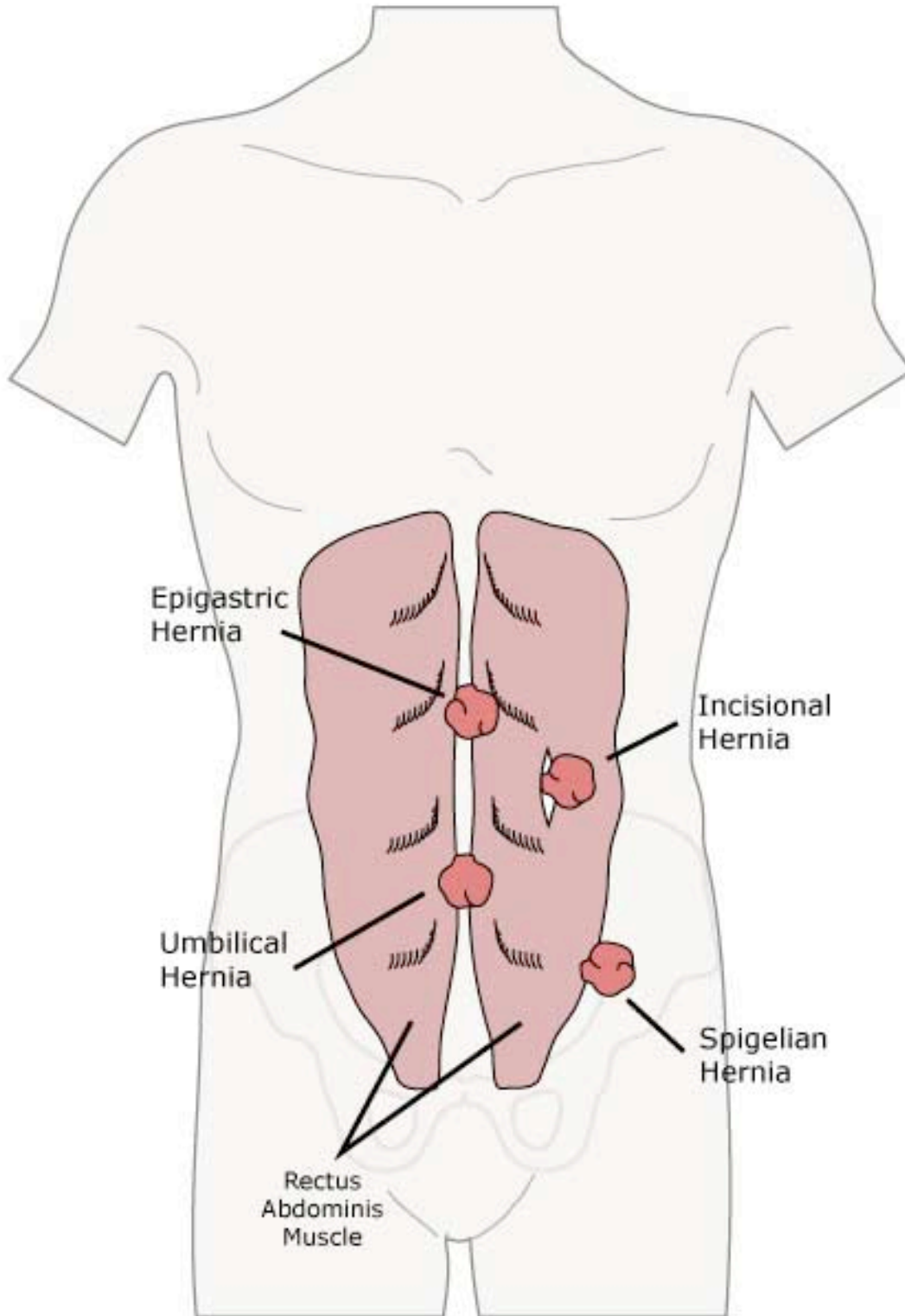
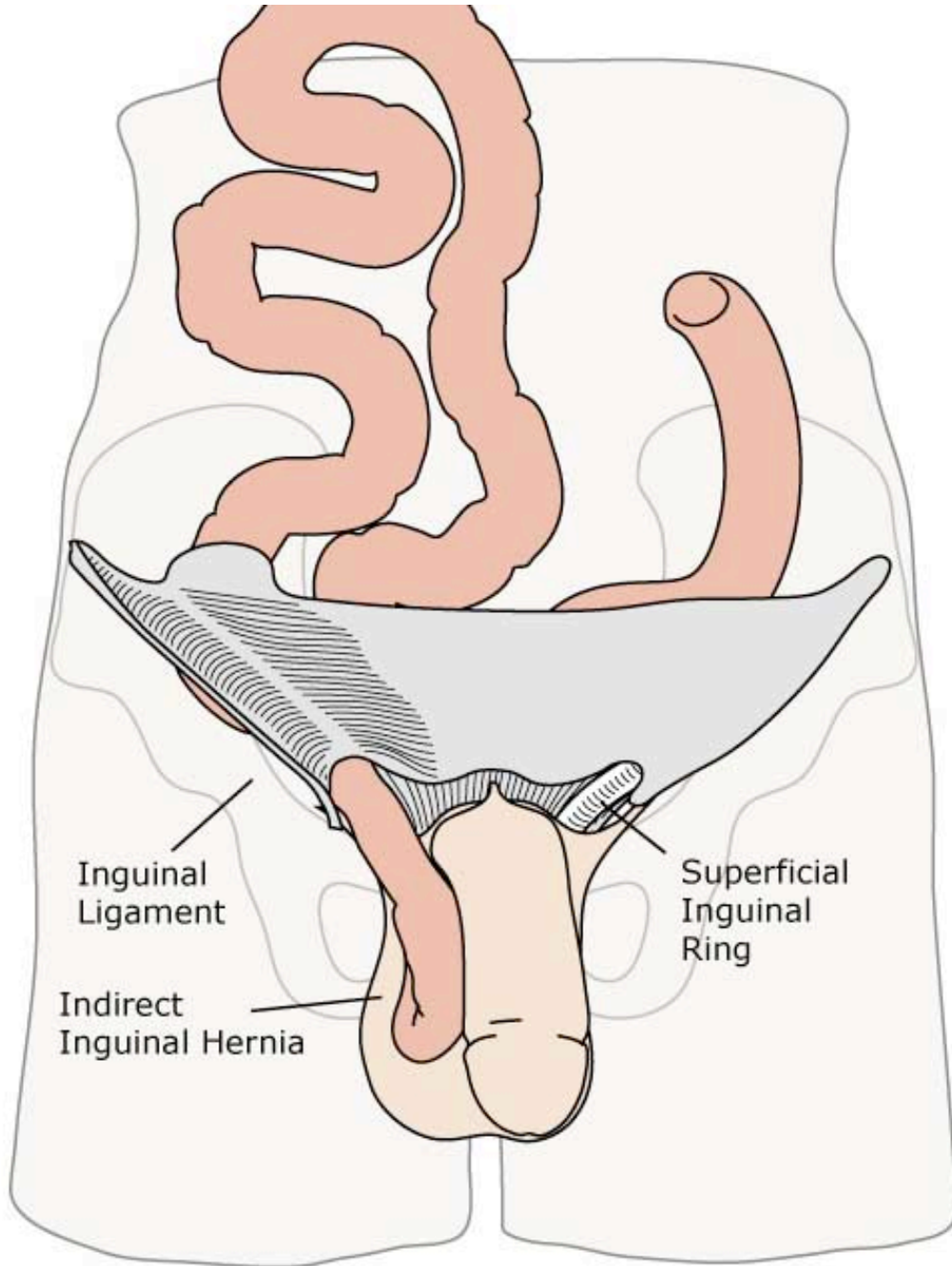


Figure 91-1 Upright abdominal film revealing multiple air-fluid levels and small bowel dilation, consistent with a diagnosis of small bowel obstruction.

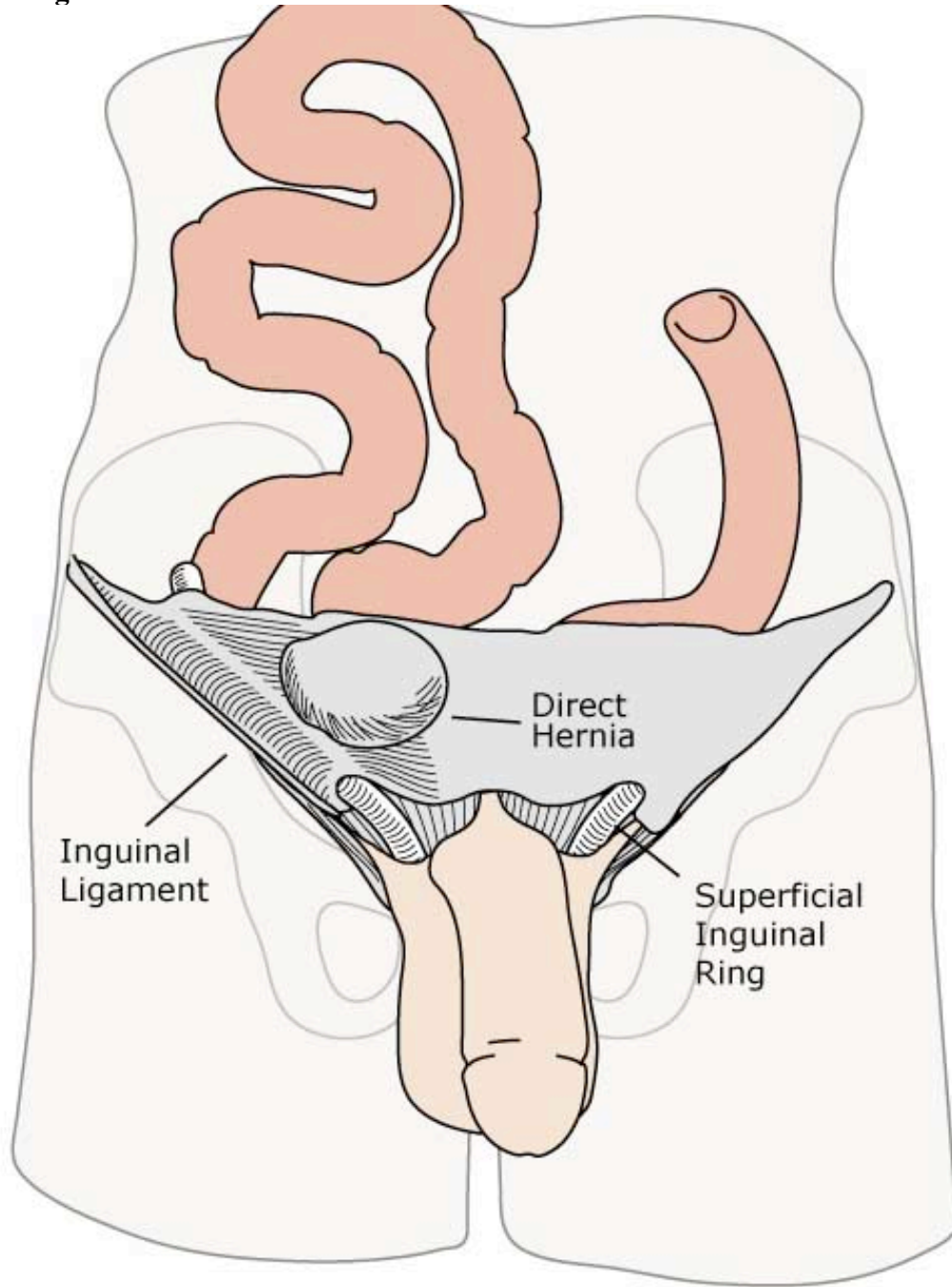
Incarcerated Ventral Hernia:



Indirect Inguinal Hernia:



Direct Inguinal Hernia:



Femoral Hernia:

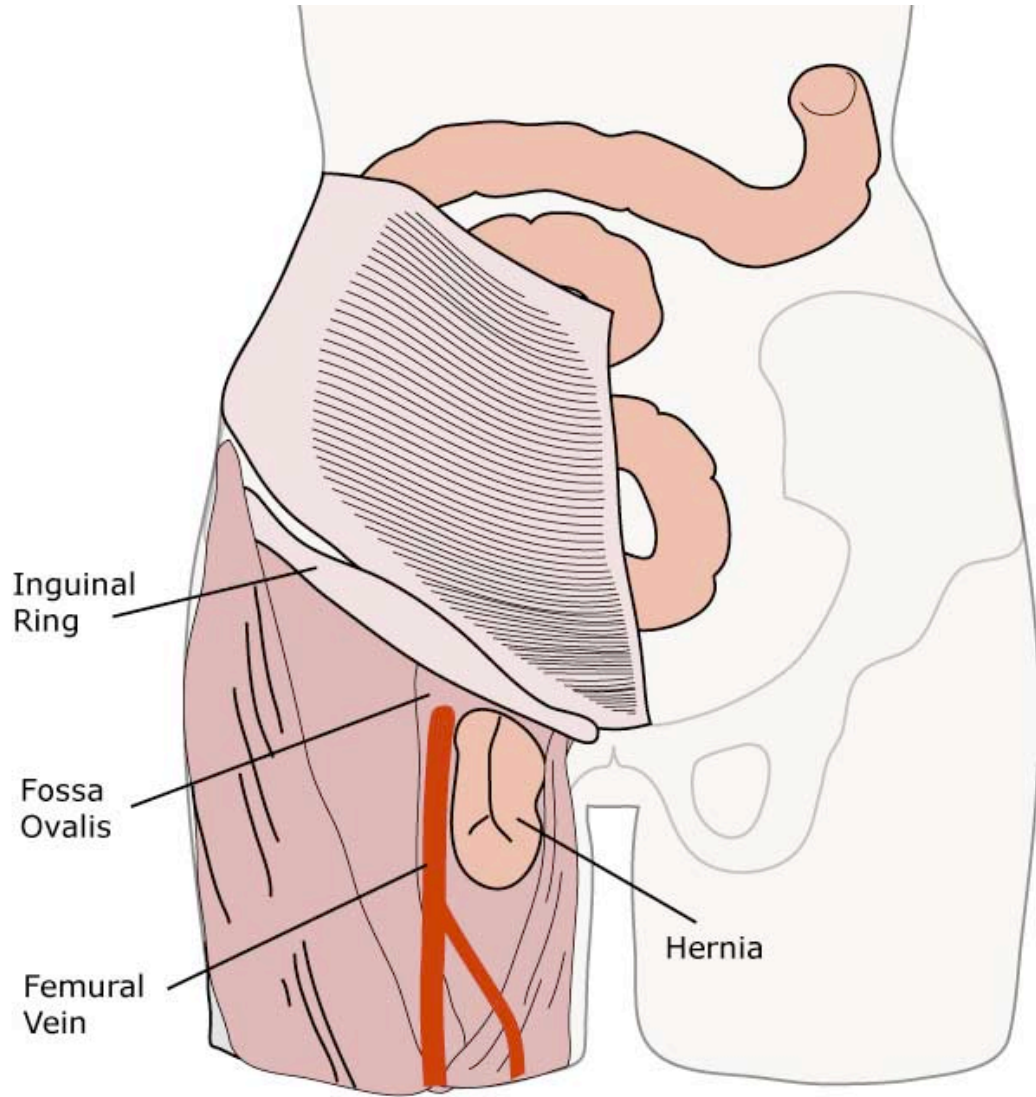


Figure 43-12 A, Right mesocolic (paraduodenal) hernia. Note that the anterior wall of a right mesocolic hernia is the ascending mesocolon. The hernia orifice lies to the right of the midline, and the superior mesenteric artery and ileocolic artery course along the anterior border of the hernia neck. B, Left mesocolic (paraduodenal) hernia. The hernia orifice is to the left of the midline, and the herniated intestine lies behind the anterior wall of the descending mesocolon. C, A right mesocolic hernia is repaired by division of the lateral peritoneal attachments of the ascending colon, reflecting it toward the left side of the abdomen. The small and large intestine then assumes a position simulating that of nonrotation of both the prearterial and postarterial segments of the midgut. Opening the neck of the hernia will injure the superior mesenteric vessels and fail to free the herniated bowel. D, A left mesocolic hernia is reduced by incising the hernia sac along an avascular plane immediately to the right of the inferior mesenteric vessels. A and B, From Brigham RA, d'Avis JC: Paraduodenal hernia. In Nyhus LM, Condon RE [eds]: *Hernia*, 3rd ed. Philadelphia, JB Lippincott, 1989, pp 484 and 485. C and D, From Brigham R, Fallon WF, Saunders JR, et al: Paraduodenal hernia: Diagnosis and surgical management. *Surgery* 96:498, 1984.) www.lww.com

Sigmoid Volvulus:



Fig. 41.3 The diagnosis of sigmoid volvulus on an abdominal flat plate x-ray is supported by an air-filled, dilated sigmoid colon arising from the pelvis, with a point of apparent termination.

Obstructing Sigmoid Lesion:



Figure 116-14 Representative film from a contrast enema of a patient with high-grade sigmoid obstruction from a stricture (arrows identify the proximal and distal extent of the stricture). Although this patient has multiple diverticula within the sigmoid colon, differentiation of this benign diverticular stricture from a malignant stricture is not possible based on this study alone.

References:**Chart:**

Lawrence P. Essentials of General Surgery. 4th ed. Philadelphia: Lippincott Williams & Wilkins; 2006. 296-300, 325-327p.

Adhesive SBO:

Marx J, Adams J, Rosen P, Hockberger R, Walls R. Rosen's Emergency Medicine: Concepts and Clinical Practice. 6th ed. St. Louis: Mosby, Inc; 2006. Chapter 91, Small Bowel Obstruction.

Incarcerated Ventral Hernia, Indirect Inguinal Hernia, Direct Inguinal Hernia, Femoral Hernia:

Roberts J, Hedges J. Clinical Procedures in Emergency Medicine. 4th ed. Philadelphia: Saunders; 2004. Chapter 45, Abdominal Hernia Reduction.

Internal Hernia:

Townsend C, Beauchamp R, Evers, Mattox, K. Sabiston Textbook of Surgery. 18th ed. Philadelphia: Saunders; 2007. Chapter 43, Abdominal Wall, Umbilicus, Peritoneum, Mesenteris, Omentum, and Retroperitoneum.

Sigmoid Volvulus:

Duthie E, Katz P, Malone M. Practice of Geriatrics. 4th ed. Philadelphia: Saunders 2007. Chapter 41, Gastroenterologic Disorders.

Obstructing Sigmoid Lesion:

Feldman M, Friedman L, Brant L. Gastrointestinal and Liver Disease. 8th ed. Philadelphia; Saunders; 2006. Chapter 116, Intestinal Obstruction and Ilius.