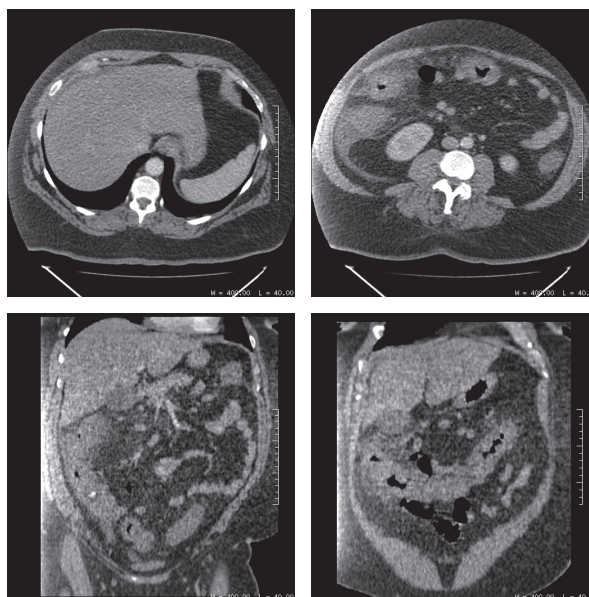


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Brief overview of the disease

Infectious colitis

Infectious colitis refers to inflammation of the colon due to an infective cause, including bacterial, viral, fungal, or parasitic infections.

In Western countries, bacterial infection is the most common cause, while in developing countries parasitic infection is much more common. Men and women are affected equally by infectious colitis, and the disease can occur in all ages with incidence increasing with age.

Infectious colitis can result from a wide-range of protean etiological agents:

- bacterial (*Shigella sp.*, *Salmonella sp.*, *Yersinia*, *Campylobacter*, *Staphylococcus*, *Escherichia coli*, *Chlamydia trachomatis*, *Clostridium difficile*)
- mycobacterial (tuberculosis: tuberculous colitis)
- fungal (histoplasmosis, mucromycosis, actinomycosis)
- viral (*Herpesvirus*, *Cytomegalovirus*, *Rotavirus*)
- parasitic (amoebiasis, schistosomiasis)

While there can be considerable overlap, the affected segment of the colon, however, may be useful in suggesting a specific organism:

- usually limited to the right colon: *Shigella*, *Salmonella*
- diffuse involvement also occurs: *Cytomegalovirus*, *E. coli*
- rectosigmoid: *N. gonorrhoea*, *Herpesvirus*, and *C. trachomatis* (lymphogranuloma venereum)
- involvement is usually confined to the descending and sigmoid colon: schistosomiasis - thought to be due to adult worms having a tendency to enter the inferior mesenteric vein

Differential diagnosis

On imaging consider other forms of colitis dependent on the clinical situation, which includes colitis from other causes:

- inflammatory bowel disease (Crohn disease, ulcerative colitis),
- ischemic colitis: usually involves watershed areas, and rarely affects the rectum,
- radiation colitis.

■ RADIOGRAPHIC FEATURES

Imaging features are often not definitive for a particular organism. Ultrasound

Findings on ultrasound include increased symmetrical wall thickening and submucosal echogenicity. On color Doppler, there may be increased mural flow.

CT

If imaging is required, CT is usually the examination of choice.

Patients with infectious colitis from any cause typically have wall thickening (this usually demonstrates homogeneous enhancement). Low attenuation regions representing edema may be detected within the wall. Other ancillary findings include:

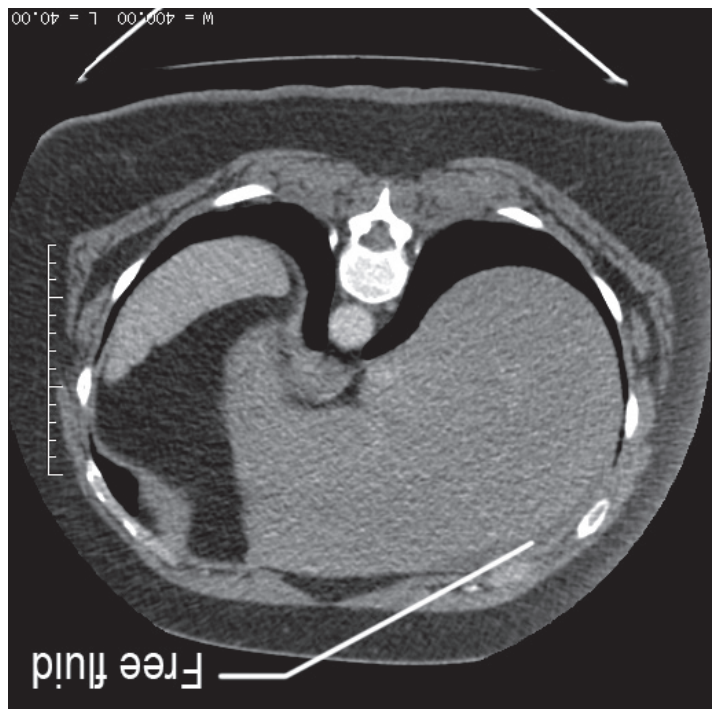
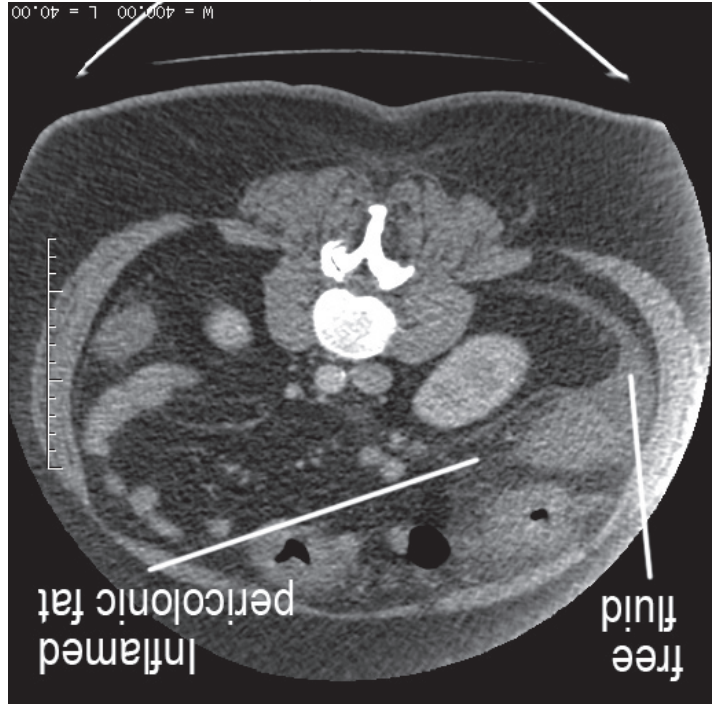
- ascites
- inflammation of the pericolic fat
- multiple gas-fluid levels due to increased fluid and fluid feces

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Answer to Radiographic Quiz

Quiz



Infectious colitis caused by Shigellosis.

DIAGNOSIS

There is minimal amount of intraperitoneal fluid located in the right sub-diaphragmatic area and in the right iliac fossa adjacent to the ascending colon (ascites).
 There is irregular wall thickening of the right large intestine from the cecum to the distal aspect of the transverse colon revealing contrast enhancement and areas of low attenuation due to edema.
 There is inflammation of the pericolic fatty tissues.

DESCRIPTION OF THE IMAGES

- PID
- Hepatic cirrhosis
- Peritoneal carcinomatosis
- Diverticulitis
- Infectious colitis

What is the most likely diagnosis?

- Infectious
- Vascular
- Toxic/metabolic
- Neoplastic
- Congenital

What is the most likely etiology of the abnormality?

- True
- False

There is evidence of diverticular disease

- True
- False

There is evidence of pneumoperitoneum

- True
- False

There is a small fluid collection adjacent to the tip of the liver and in the right iliac fossa

- Liver
- Retroperitoneum
- Large intestine
- Small intestine

Where is the abnormality located?