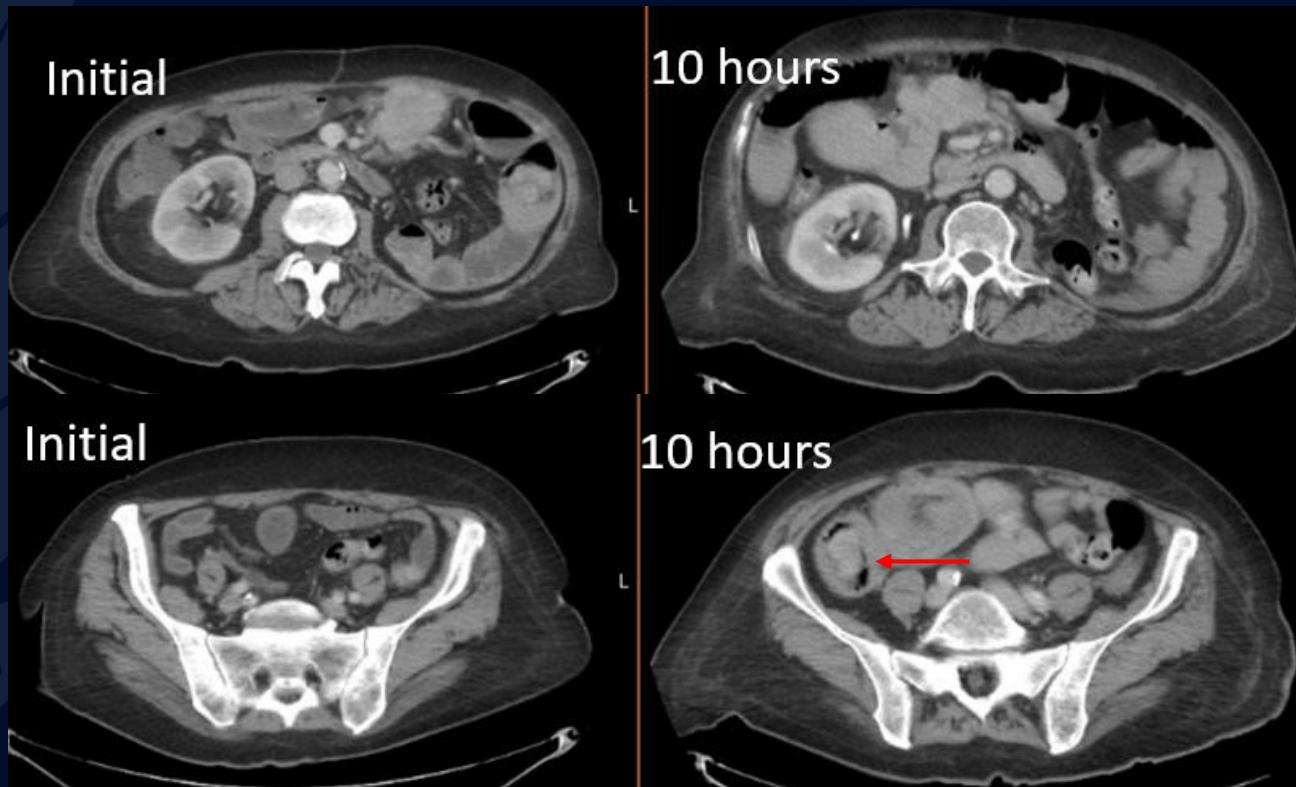
A large, stylized graphic of a leaf or branch, rendered in a dark blue color, occupies the left side of the slide. It has a central vein and several smaller veins branching off, with a wavy, organic shape.

# 66-year-old male with acute diffuse abdominal pain and unintentional weight loss


Melissa Ulbrick, MS3

# CT



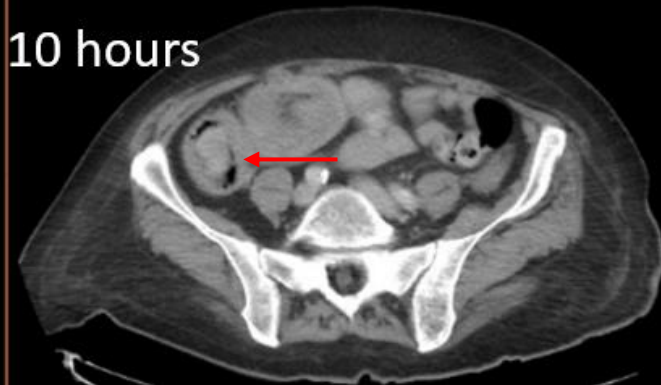
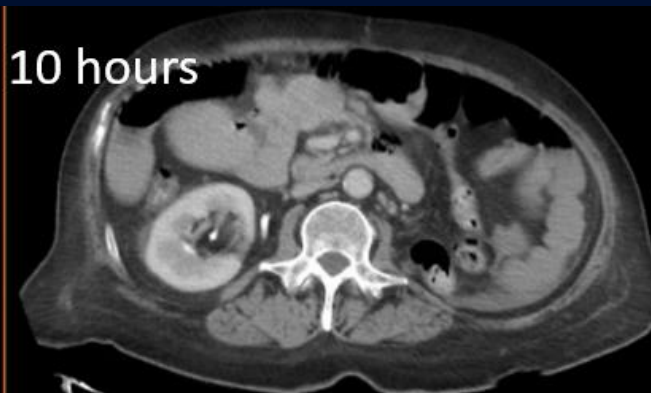
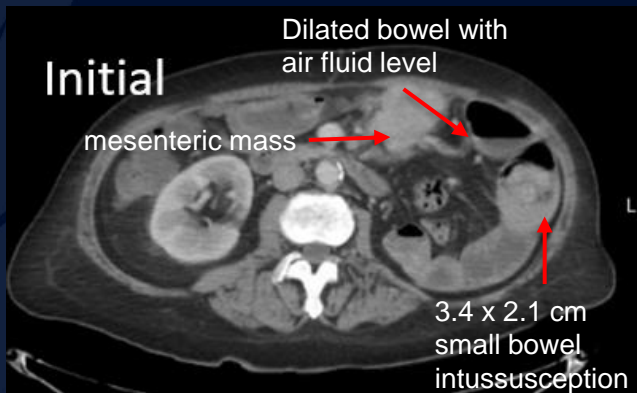
A large, stylized oak leaf graphic in a dark blue color, positioned on the left side of the slide.

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A large, stylized oak leaf graphic in a dark blue color, positioned on the left side of the slide. The leaf has a prominent central vein and several smaller veins branching off, with a scalloped edge.

# Small Bowel Intussusception

# CT



# Small Bowel Intussusception

- 90% of small bowel intussusceptions in adults are caused by pathologic lead points
  - Small bowel tumors account for about 5% of all GI tumors
  - Malignant: Adenocarcinoma, Carcinoid, Leiomyosarcoma, Lymphoma, GIST
    - Metastases
      - Most common primary sites are ovary, appendix and colon
      - Other common sites that spread hematogenously include melanoma, breast, and lung
    - Benign: Leiomyoma, Adenoma, Lipoma, Hemangioma
      - Rare: Desmoid, Polyposis Syndromes (Gardner, Peutz-Jeghers)
- **This case:** renal cell carcinoma
  - Renal Cell Carcinoma accounts for 90% of all renal cancers
  - More common in men than women and often presents after age 60
  - Most common metastatic sites include lung, bone, liver, adrenal gland, and brain
    - Spreads hematogenously

# Diagnostic Techniques

- EGD, Colonoscopy, Ultrasound, and Barium swallow
  - First line for nonspecific GI symptoms
- CT Abdomen
  - May be hard to differentiate collapsed bowel versus wall thickening
  - Can detect 70 to 80% of small bowel neoplastic lesions
- CT-enterography or MRI-enterography
  - PO contrast helps distend the small bowel to visualize lesions and differentiate etiologies of lesions
- Capsule Endoscopy
  - Good detection for early small bowel masses
- PET-CT
  - Used when CT/MRI are unrevealing or in metastatic disease

# Imaging Findings

Malignant Mass	Features
Adenocarcinoma	<b>Duodenum</b> ; usually <b>circumferential</b> but can be polypoid; invasive disease may show <b>fat stranding</b> ; moderate enhancement
Carcinoid	Rare neuroendocrine tumor; <b>appendix</b> and distal ileum; <b>mesenteric mass</b> with small bowel wall thickening; <b>calcifications</b>
Leiomyosarcoma	<b>Ileum and jejunum</b> ; ulcerate and <b>bleed</b> ; difficult to differentiate from leiomyoma
Lymphoma	<b>Distal ileum</b> ; risk factors include celiac, Chron's, SLE, history of chemo or extra-intestinal lymphoma; <b>thick-walled mass</b> with dilated bowel; <b>enlarged lymph nodes</b> ; <b>no obstruction</b>
GIST	<b>Stomach</b> ; well-defined <b>exophytic</b> mass, often extraluminal; enhancement
Metastasis	Single or multiple polypoid intraluminal masses or wall thickening; <b>luminal narrowing</b> ; signs of metastatic disease



# Imaging Findings

Benign Mass	Features
Leiomyoma	Rare; <b>jejunum</b> ; well demarcated; ulcerate and <b>bleed</b> ; hypervascular
Adenoma	<b>Duodenal and ileocecum</b> ; pre-cancerous polyps (pedunculated, sessile or mural); enhance
Lipoma	<b>Ileocecum</b> ; well defined intraluminal mass; <b>non-enhancing</b>
Hemangioma	<b>Jejunum</b> ; sessile or pedunculated; <b>arterial enhancement</b> ; GI <b>bleeding</b>
Desmoid	<b>Fibrous tissue of the mesentery</b> ; benign but locally aggressive; <b>non-enhancing</b>
Hamartoma	<b>Jejunum</b> ; smooth, intraluminal polyp; enhancing; common in Peutz-Jeghers Syndrome

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