



# Meeting scuola di specializzazione

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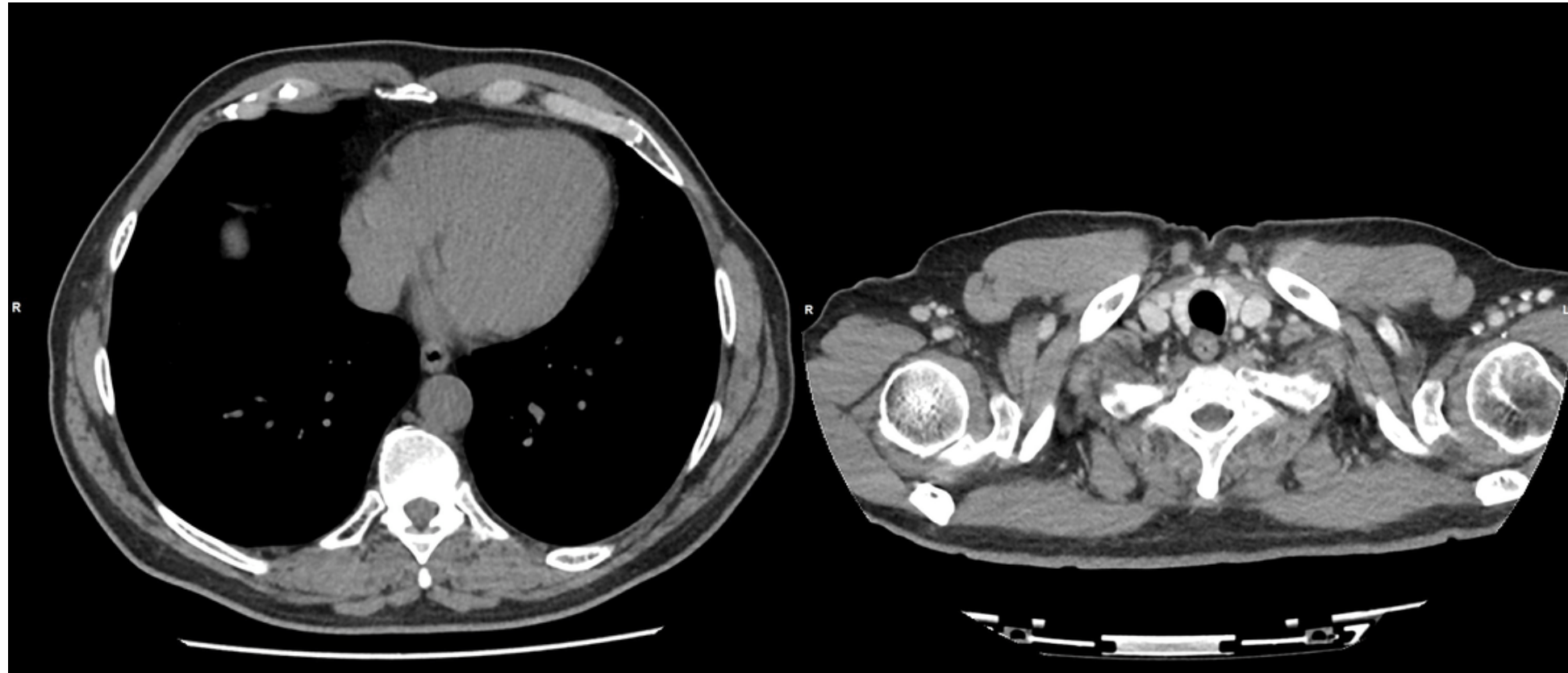
# CLINICAL CASE

**67 yo, male**

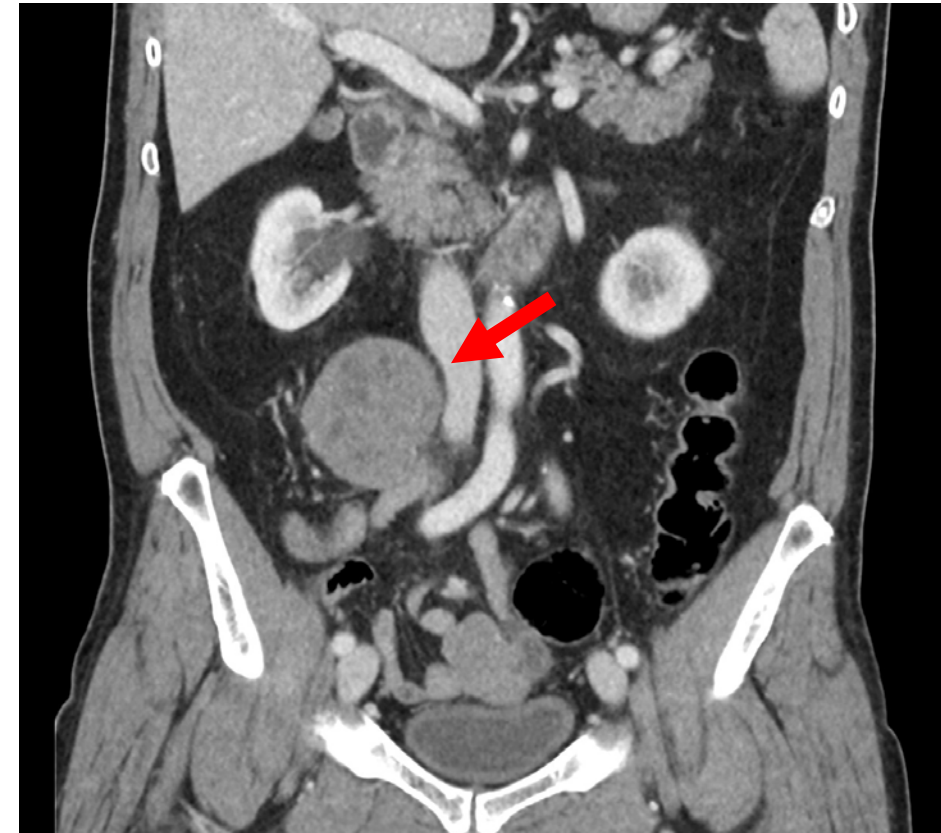
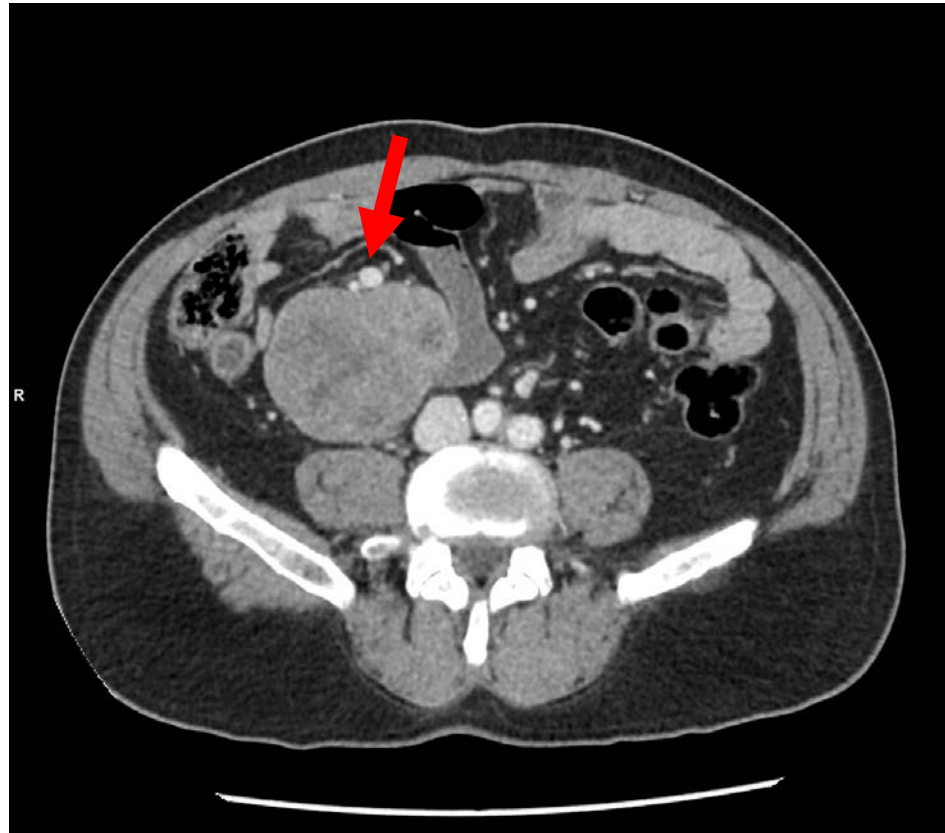
- Abdominal pain
- No laboratory tests' alteration



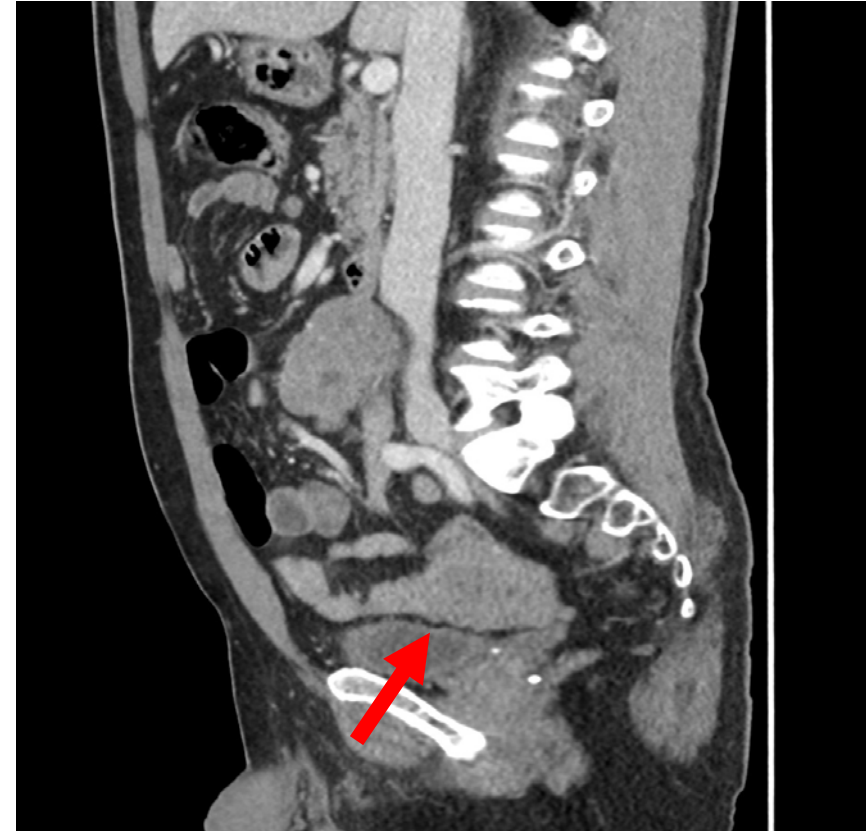
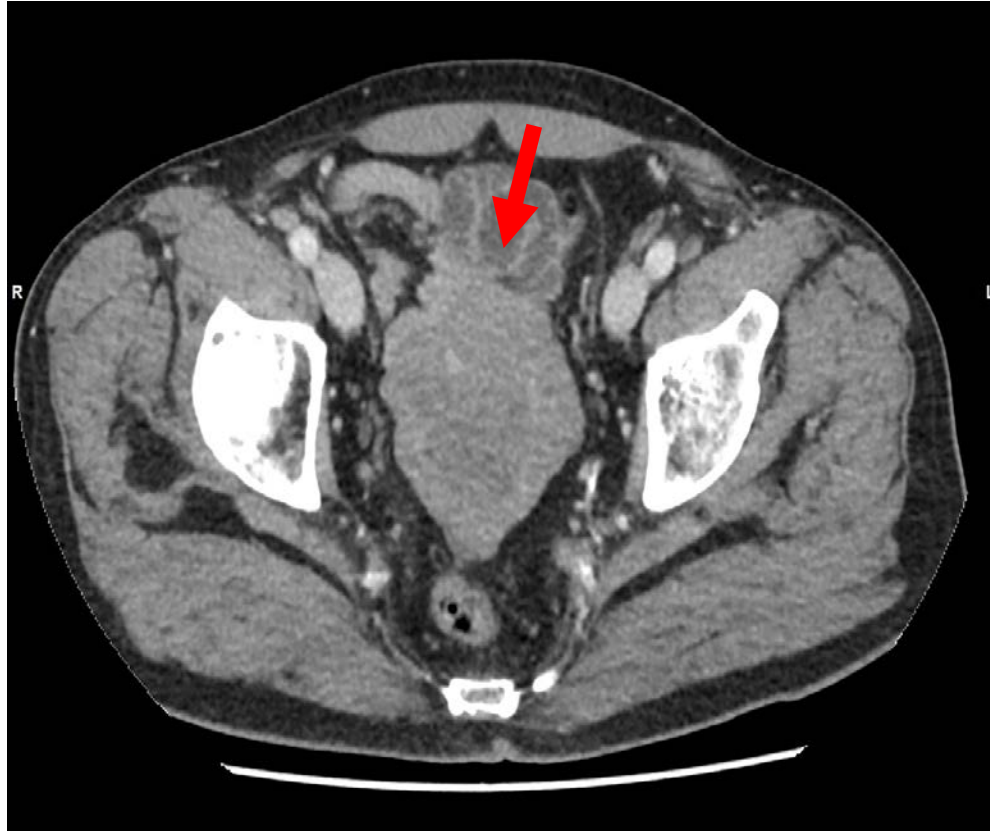
# CLINICAL CASE



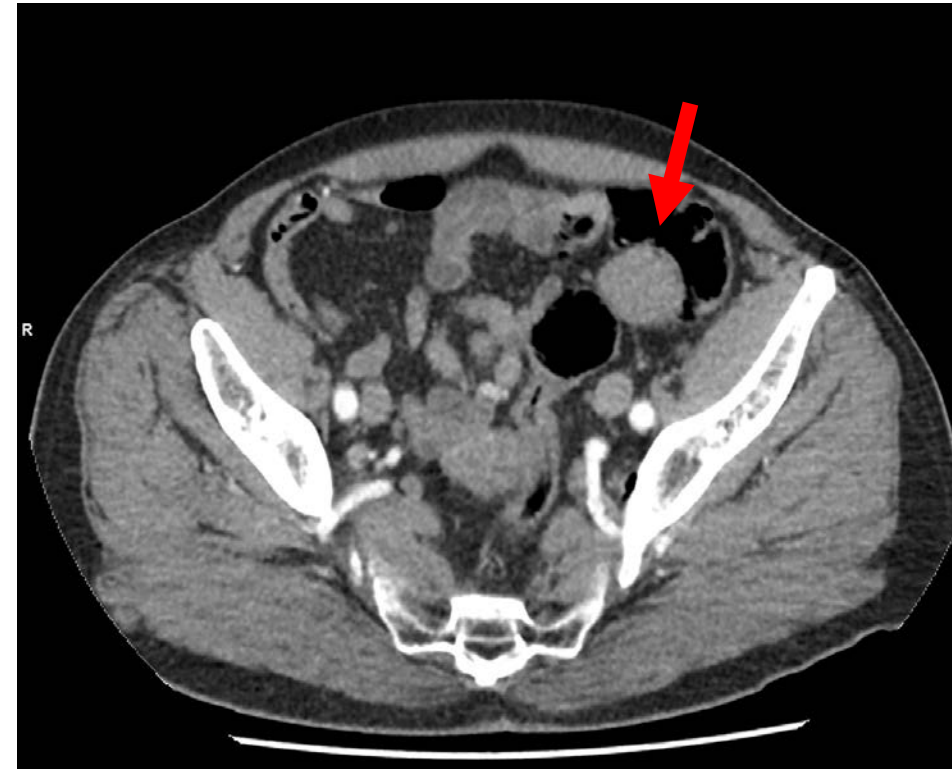
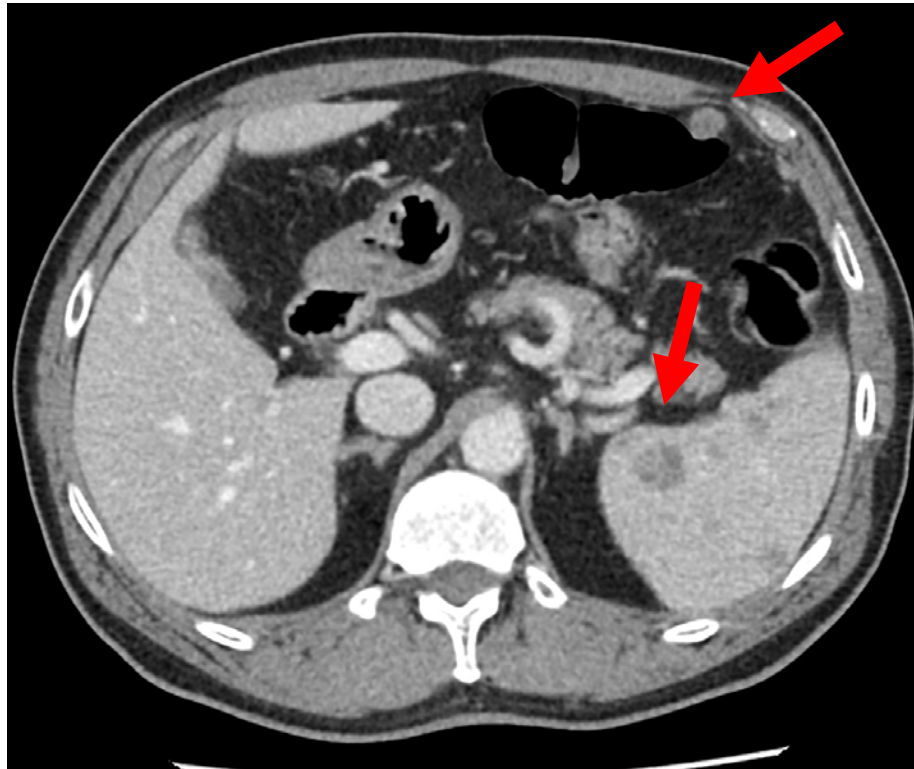
# CLINICAL CASE



# CLINICAL CASE



# CLINICAL CASE





# POSSIBLE DIAGNOSIS?

A) Desmoid Tumor

B) Lymphoma

C) Neuroendocrine Tumor (NET)

D) Gastrointestinale Stromal Tumor (GIST)



# POSSIBLE DIAGNOSIS?

REVIEW

## Imaging spectrum of mesenteric masses

Radwan Diab<sup>1</sup> · Mayur Virarkar<sup>1</sup> · Mohammed Saleh<sup>1</sup> · Sanaz Javadi<sup>1</sup> · Priya Bhosale<sup>1</sup> · Silvana Faria<sup>1</sup>

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## More than just metastases: a practical approach to solid mesenteric masses

Abbey J. Winant,<sup>1</sup> Amar Vora,<sup>1</sup> Paula S. Ginter,<sup>2</sup> Marc S. Levine,<sup>3</sup> Douglas A. Brylka<sup>1</sup>



REVIEW

## Mesenteric tumors: Diagnosis and treatment

C. Dufay<sup>a,\*</sup>, A. Abdelli<sup>a</sup>, V. Le Pennec<sup>b</sup>, L. Chiche<sup>a</sup>

EDUCATION EXHIBIT

457

RadioGraphics

## Mesenteric Neoplasms: CT Appearances of Primary and Secondary Tumors and Differential Diagnosis<sup>1</sup>

**CME FEATURE**  
See accompanying

Sheila Sheth, MD • Karen M. Horton, MD • Melissa R. Garland, MS  
Elliot K. Fishman, MD



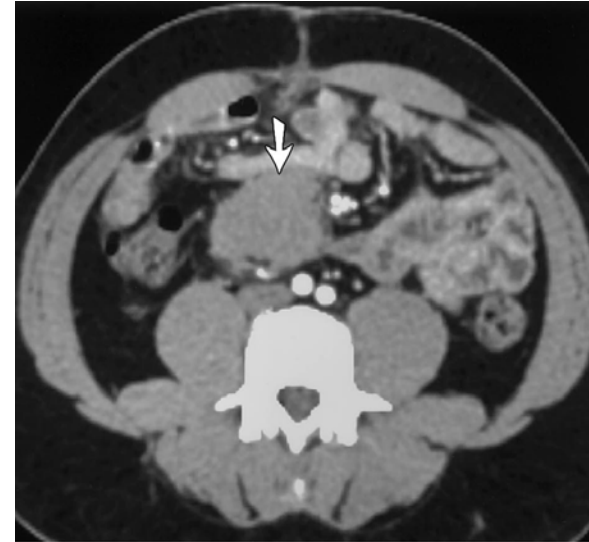


# DESMOID TUMOR

- Desmoid tumor is a rare, benign, fibrous neoplasm mainly composed of mesenchymal tissue (8% involve the mesentery)
- More common in females from puberty to 40 years of age
- 5–16% of Familial adenomatous polyposis (FAP) patients have 1000-fold risk in developing desmoids fibromatosis
- Nonspecific symptoms (abdominal pain)

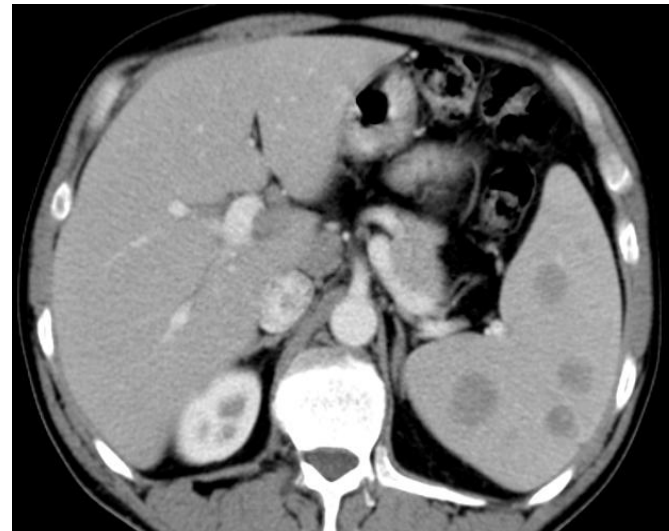
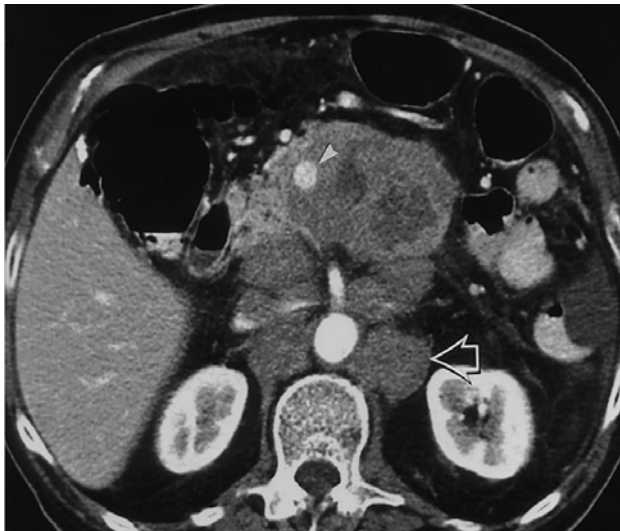
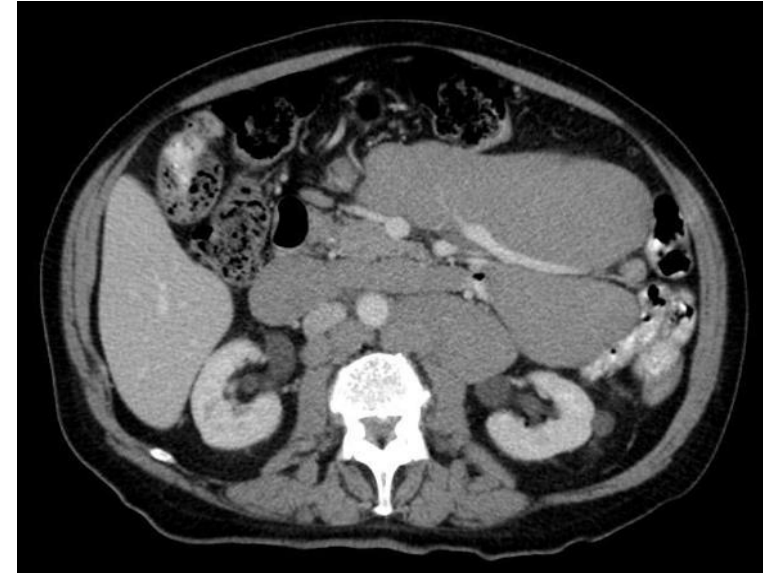
# DESMOID TUMOR

- Well defined, large soft tissue masses
- More likely to infiltrate adjacent structures
- Collagenous stroma: Hyperdense to muscle  
Myxoid stroma: Hypodense to muscle



# LYMPHOMA

- No calcification
- Sandwich sign: mesenteric vessels entrapped by inflamed fat and nodes with homogenous enhancement
- Pseudocapsule



- Lymphoma is the **most common mesenteric malignancy**
- Systemic symptoms: fever, night sweats, weight loss
- E.O.: lymphadenomegaly, hepatosplenomegaly

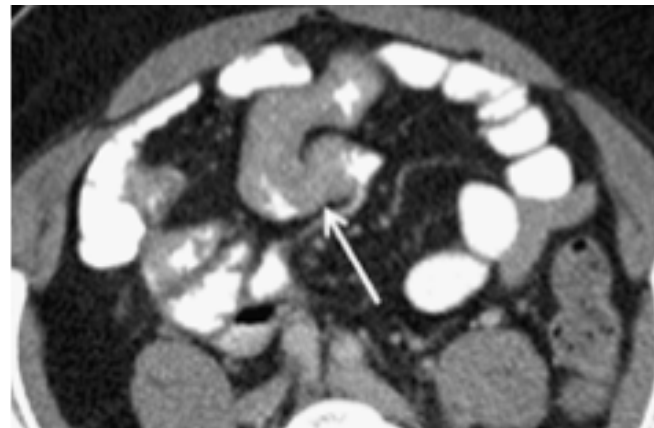
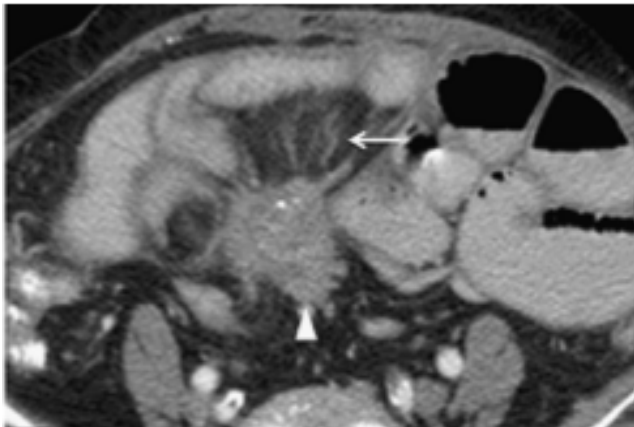


# NEUROENDOCRINE TUMOR (NET)

- Most common malignant neoplasm of the small intestine (2% of GI malignancies)
- Origin from **neuroendocrine cells** of intestinal mucosa or submucosa
- **Ki-67** % expression
- Carcinoid syndrome: more frequent in patients with hepatic metastases

# NEUROENDOCRINE TUMOR (NET)

- Coarse calcifications
- Soft tissue strands extending into small bowel mesentery “star-like”
- Spiculated, solid mesenteric mass with calcification



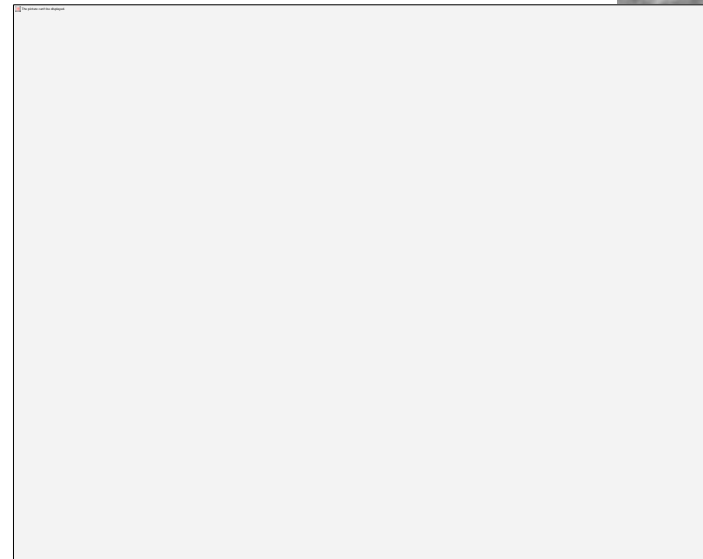


# GIST

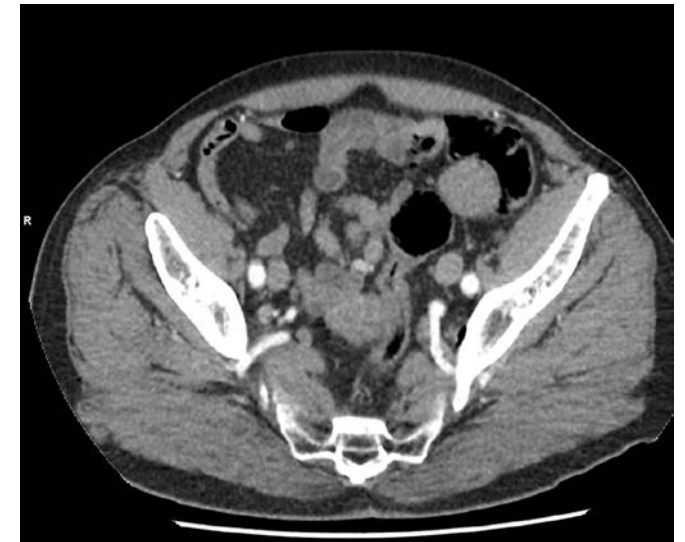
- Origin from **interstitial cells of Cajal (ICC)** in the myoenteric plexus
- **0.1%-3% of GI malignancies:** Stomach (60%); Small Bowel (30%); Colon-rectum (5%)
- **C-KIT mutation (CD117)** expression

# GIST

- Lymphnodal involvement extremely rare
- Localized disease in 80% of patients with no invasion of adjacent organ
- Often internal cystic areas, reflecting internal necrosis and hemorrhage



# CLINICAL CASE





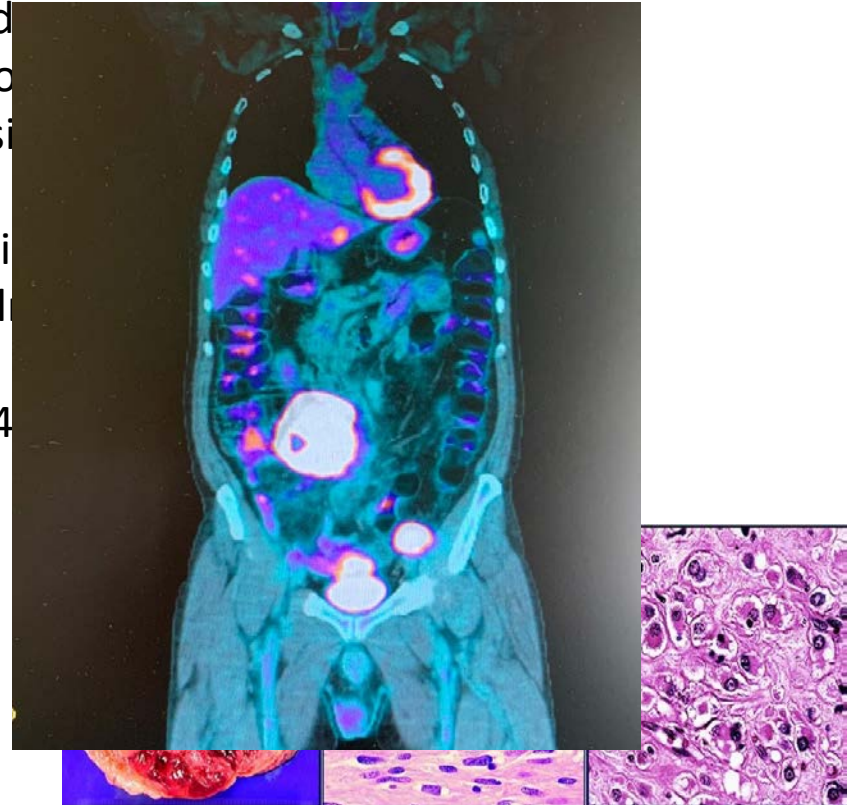
# WHAT IS THE DIAGNOSIS?

## Gastrointestinal Stromal Tumor (GIST)

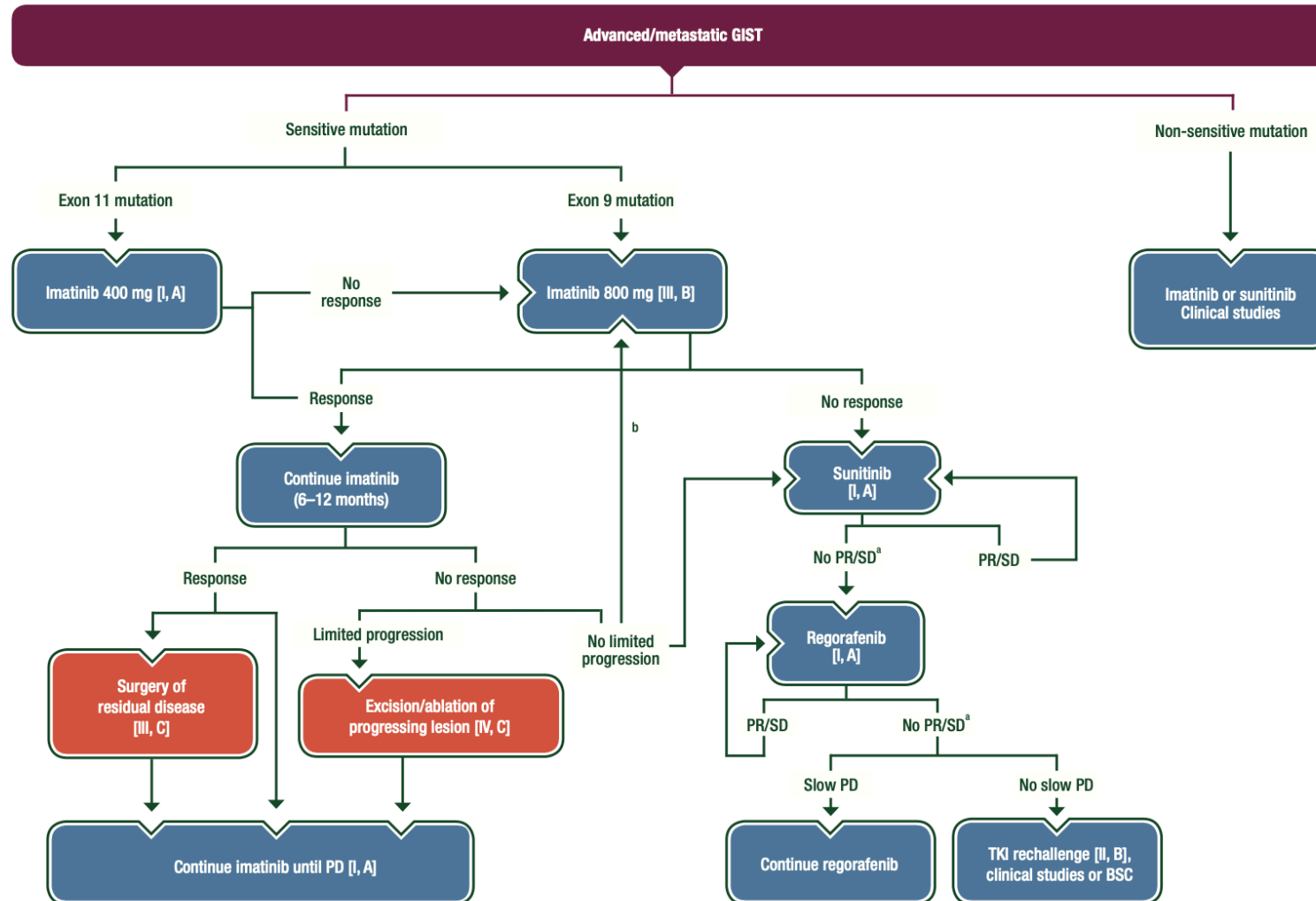
### Esame Microscopico:

Si osserva proliferazione neoplastica, con **sottili sepimenti fibrosi** d un aspetto lobulato, formata da **cellule con nucleo allungato**, ipercro indice di proliferazione superiore al 10%, senza evidenza di mitosi citoplasma è scarsamente definibile e debolmente eosinofilo.

**WHAT ABOUT THE SPLEEN?**  
La popolazione cellulare neoplastica è risultata positiva alle reazioni immunohistochemiche anti-vimentina, anti-CD117, anti-DOG1, anti-CD117, anti-CD117, e focali EMA, mentre è risultata negativa a quelle con anti-proteina pancitocheratina, anti-actina muscolo liscio, anti-desmina, anti-CD34, anti-podoplanina, anti-HMB45, anti-citocheratina 6/6, ed anti-WT1.



# TREATMENT



**Figure 2.** Management of advanced/metastatic GIST.

<sup>a</sup>Surgery of limited progression may be considered

<sup>b</sup>If previously treated with 400 mg imatinib.

BSC, best supportive care; GIST, gastrointestinal stromal tumour; PD, progressive disease; PR, partial response; SD, stable disease; TKI, tyrosine kinase inhibitor.

# RESPONSE EVALUATION

	RECIST	Choi criteria
CR	Disappearance of all lesions No new lesions	Disappearance of all lesions No new lesions
PR	<u>Decrease in tumor size <math>\geq 30\%</math></u> No new lesion No PD of non-target lesions	<u>Decrease in tumor size <math>\geq 10\%</math> or decrease in tumor density <math>\geq 15\%</math> on CT</u> No new lesions No PD of non-measurable lesions
SD	Does not meet criteria for CR, PR or PD No symptomatic deterioration attributed to tumor progression	Does not meet criteria for CR, PR, or PD No symptomatic deterioration attributed to tumor progression
PD	<u>Increase in tumor size <math>\geq 20\%</math></u> <u>New lesions</u>	<u>Increase in tumor size <math>\geq 10\%</math> and does not meet PR criteria by tumor density</u> <u>New lesions</u>

CR complete response, PR partial response, SD stable disease, PD progression of disease, RECIST Response Evaluation Criteria in Solid Tumors