

IUS in Non-IBD

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Chicago, USA – November 4th, 2025

Disclosures

- **Consultant:** Neurologica Corp., a subsidiary of Samsung Electronics Co., Ltd.; Pfizer; Johnson&Johnson; Abbvie
- **Advisory Board:** Celltrion, Takeda, Sanofi
- **Speaker Fees:** Prometheus Biosciences
- **Shareholder:** Dova Health

Case 1

6-year-old female referred by her pediatrician for:

Abdominal pain

Iron deficiency anemia

Fecal occult blood +

History of Present Illness

Feeling more tired than usual since December

Fatigue is stable, not worsening, but also not improving

Abdominal pain every other day

- Generalized
- 15-30 minutes
- Every other day, unrelated to eating or bowel movements
- Appetite is normal, without weight loss
- Normal growth velocity

Stool

- Visible blood, currant jelly like
- Formed stool with blood mixed in
- 1-2 bowel movements daily
- Usually formed, occasional diarrhea
- Denies urgency, tenesmus, or nocturnal bowel movements

Labs 3/7/2025

AST 20

ALT 11

GGT 7

% Iron saturation 3

Iron 10

Ferritin 3

WBC 5.8

Hgb 7.7

Hct 27.5

Plt 376

TSH 1.67

Free T4 1.24

ESR 13

CRP 0.1 mg/L

IgE 239

IgA 125

TTG IgA negative

Endomysial IgA negative

Additional History

Diet: Does not include a lot of dairy (6-8 oz per day in the form of milk), otherwise well rounded and diverse with sufficient quantity

Ethnic Background: Saffardic Jewish

Family History: Oldest of 4 children, 3 healthy siblings,

- Father with mild Crohn's disease on 6-MP



Differential Diagnosis?



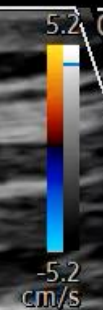
What Would You Do Next?



Small Parts / BOWEL - / LA2-14A / FPS14 / 2.5cm / MI1.3 / TIs0.3 / 03-24-2025 07:56:15 AM
[2D] Frq Res.1 / GN 61 / DR 49 / FA 4 / P 100
[C] Frq Gen. / GN 51 / 0.80kHz / P 100



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RS85



SIGMOID COLON



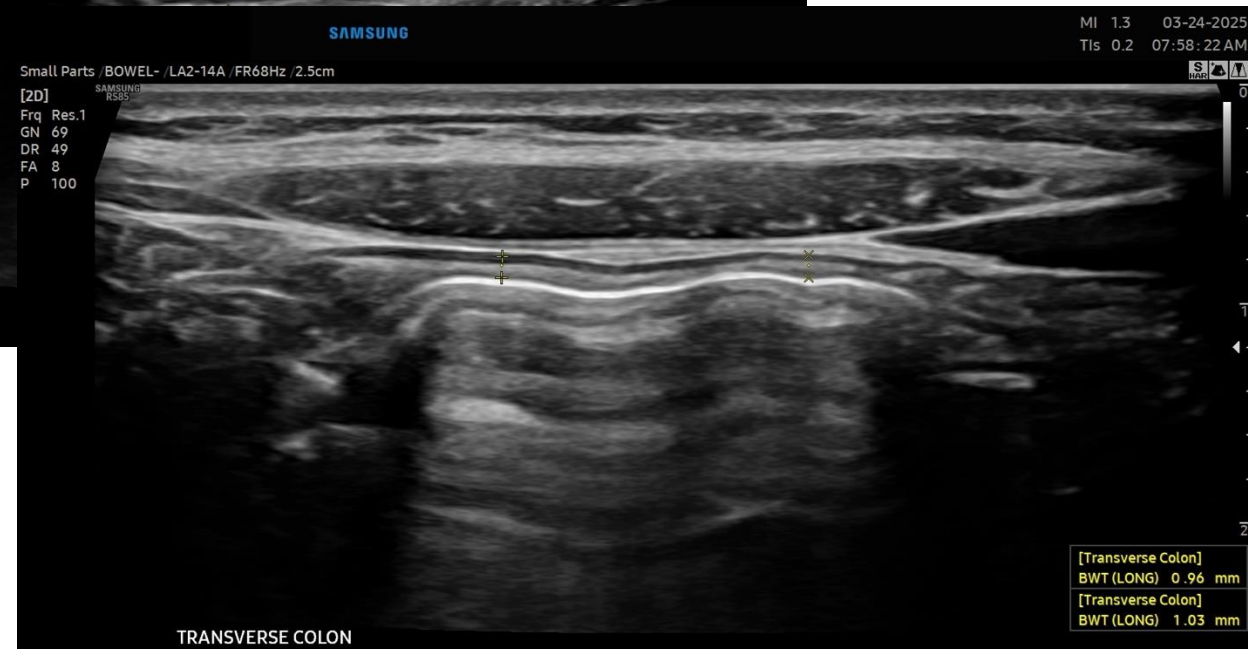
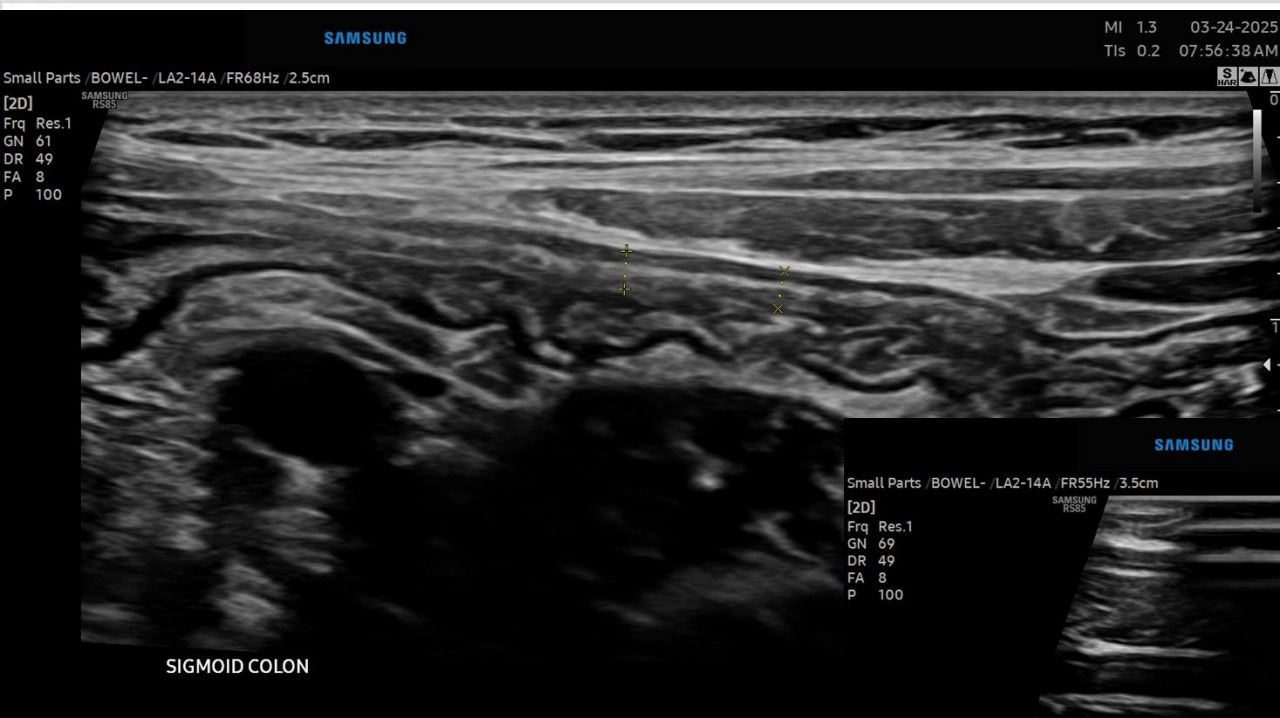
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[PD] Frq Gen. / GN 61 / 0.74kHz / P 100

S
HAR

SAMSUNG
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5.2
0
-5.2
cm/s

DESCENDING COLON





Small Parts / BOWEL - / LA2-14A / FPS18 / 2.5cm / MI1.3 / TI0.4 / 03-24-2025 07:58:43 AM

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[C] Frq Gen. / GN 51 / 0.80kHz / P 100



SAMSUNG
RS85

5.2
0
-5.2
cm/s

TRANSVERSE COLON



Small Parts / BOWEL- / LA2-14A / FPS61 / 3.0cm / MI1.3 / TIs0.2 / 03-24-2025 08:01:15 AM
[2D] Frq Res.1/GN 69/DR 49/FA 8 / P 100



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TRANSVERSE COLON

0

1

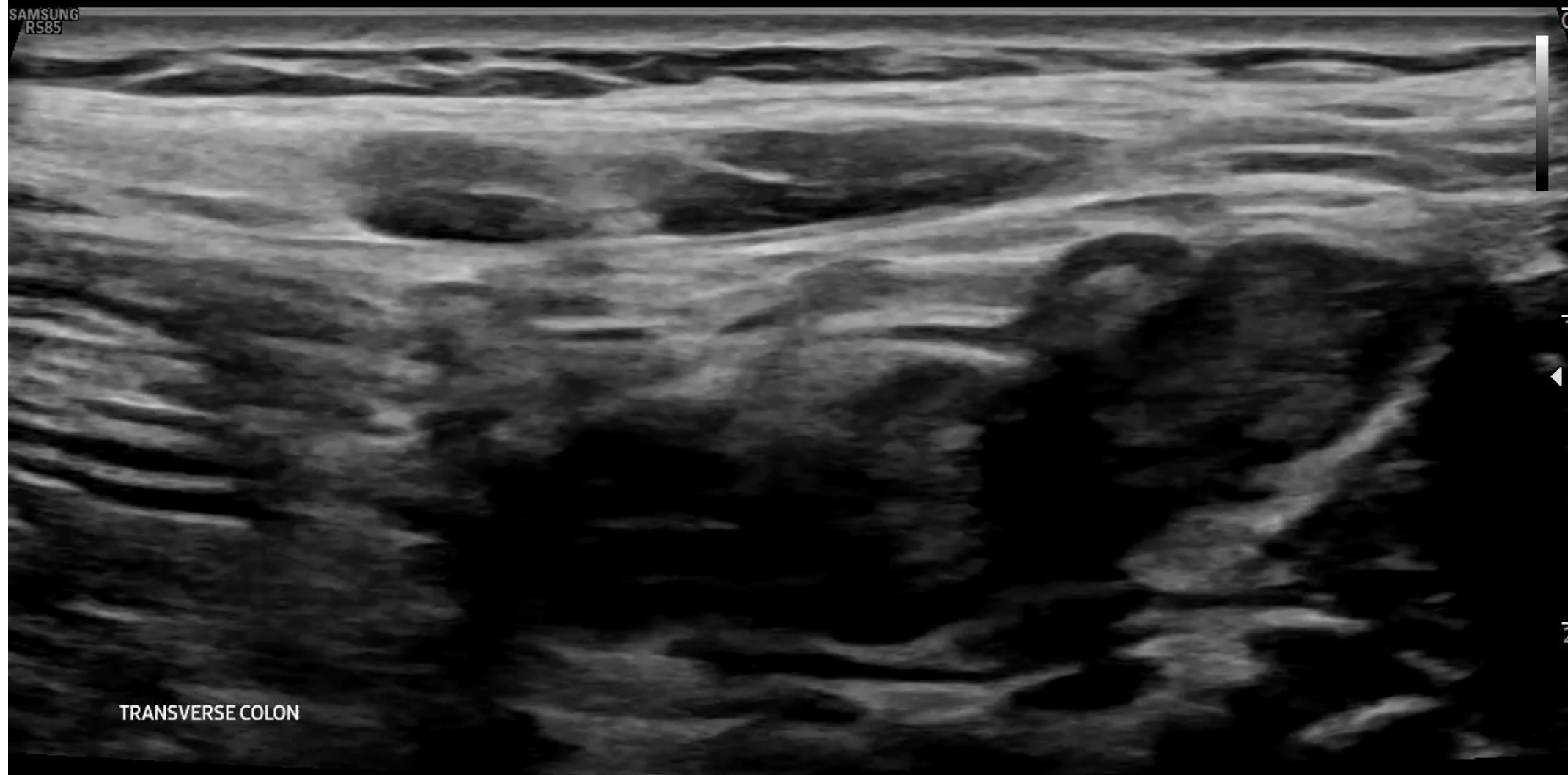
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TRANSVERSE COLON



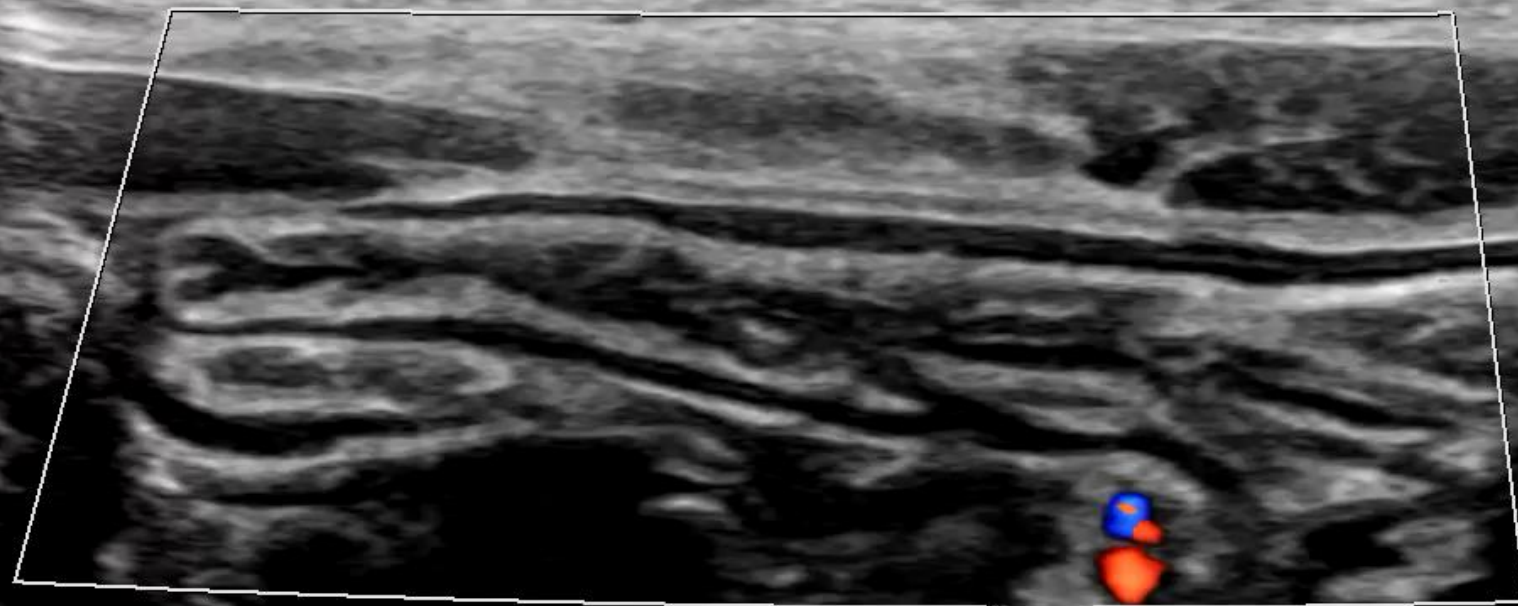
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TRANSVERSE COLON



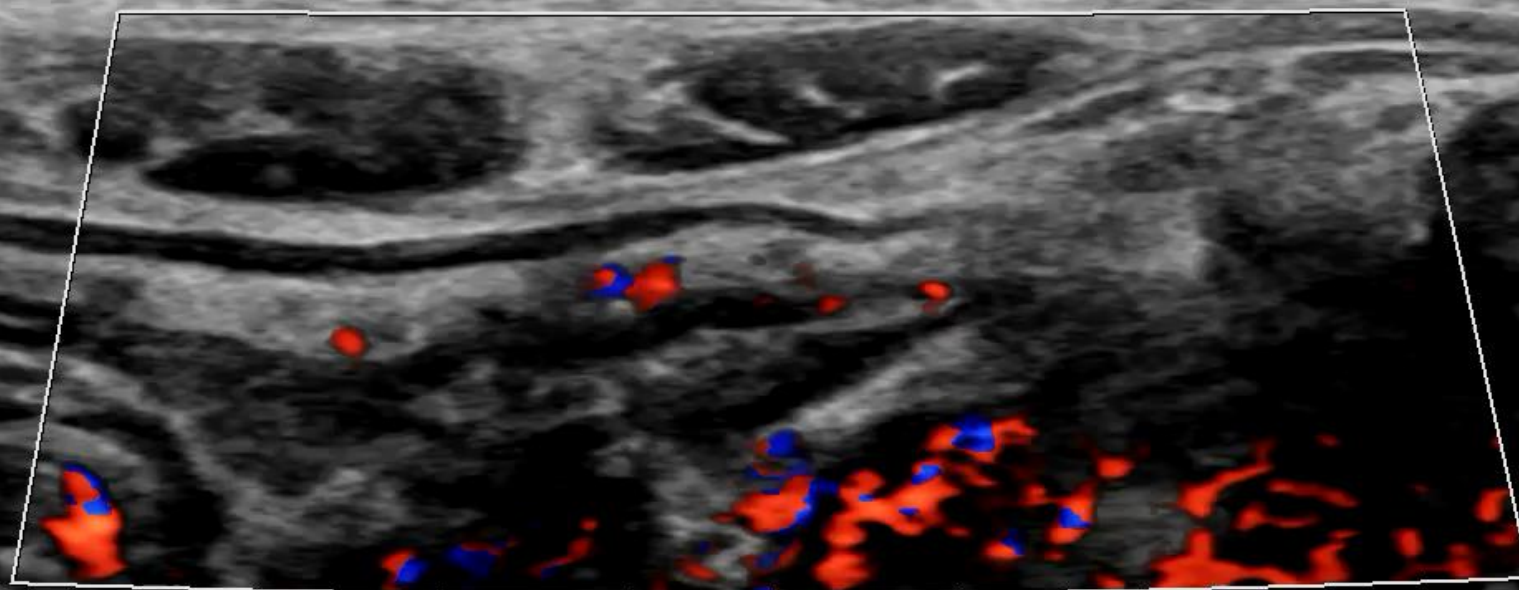
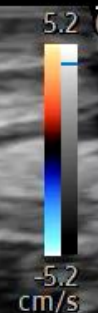
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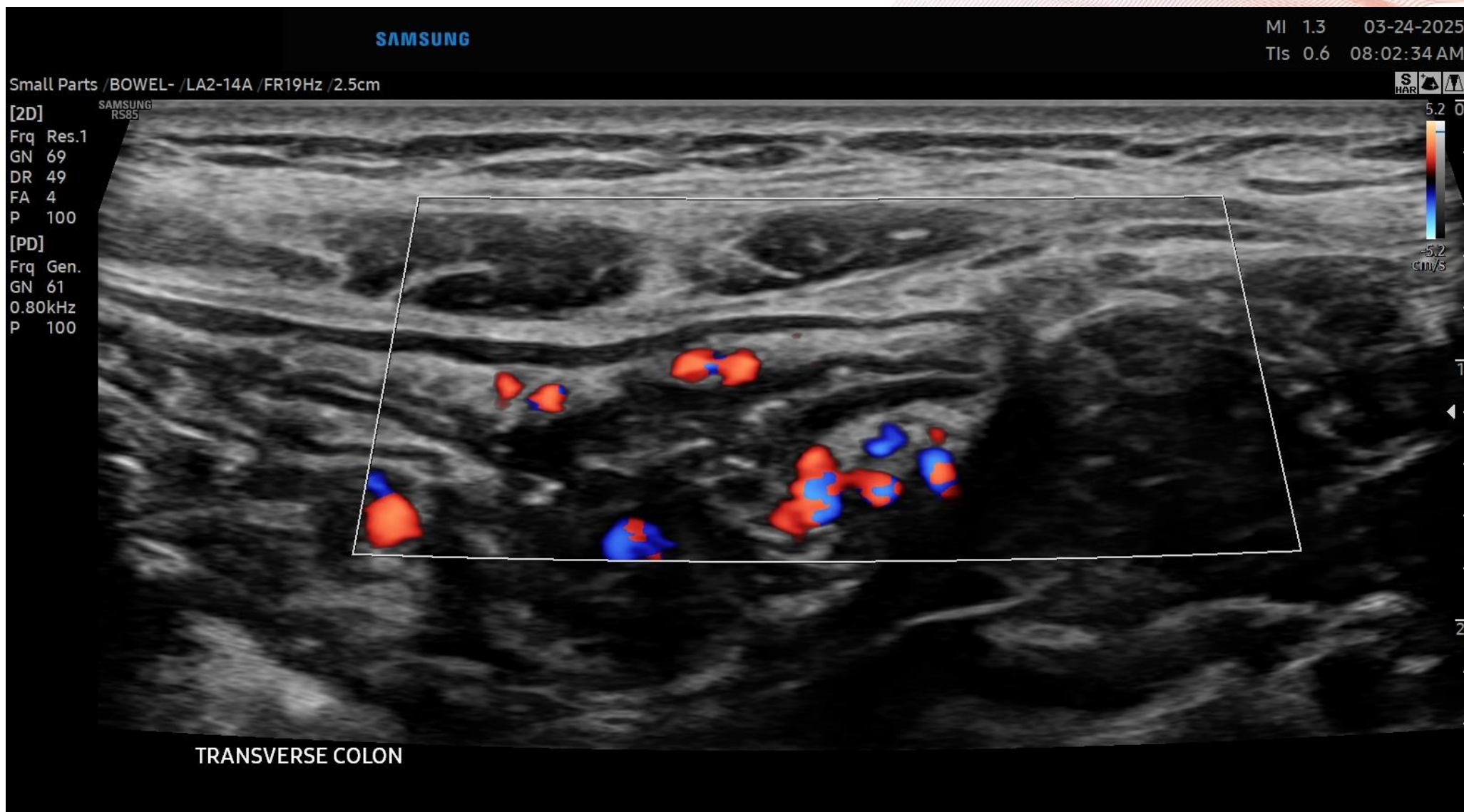
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TRANSVERSE COLON





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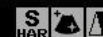
MI 1.3 03-24-2025
TIs 0.2 08:01:33 AM

Small Parts /BOWEL- /LA2-14A /FR61Hz /3.0cm

[2D]

SAMSUNG
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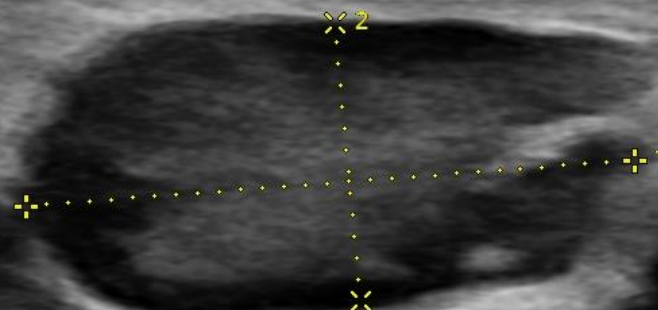
Frq Res.1
GN 69
DR 49
FA 8
P 100



0

1

2



TRANSVERSE COLON

D1	19.25	mm
D2	8.81	mm
Avg(All)	14.03	mm



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MI 1.3 03-24-2025

TIs 0.2 08:01:09 AM

Small Parts /BOWEL- /LA2-14A /FR61Hz /3.0cm

[2D]

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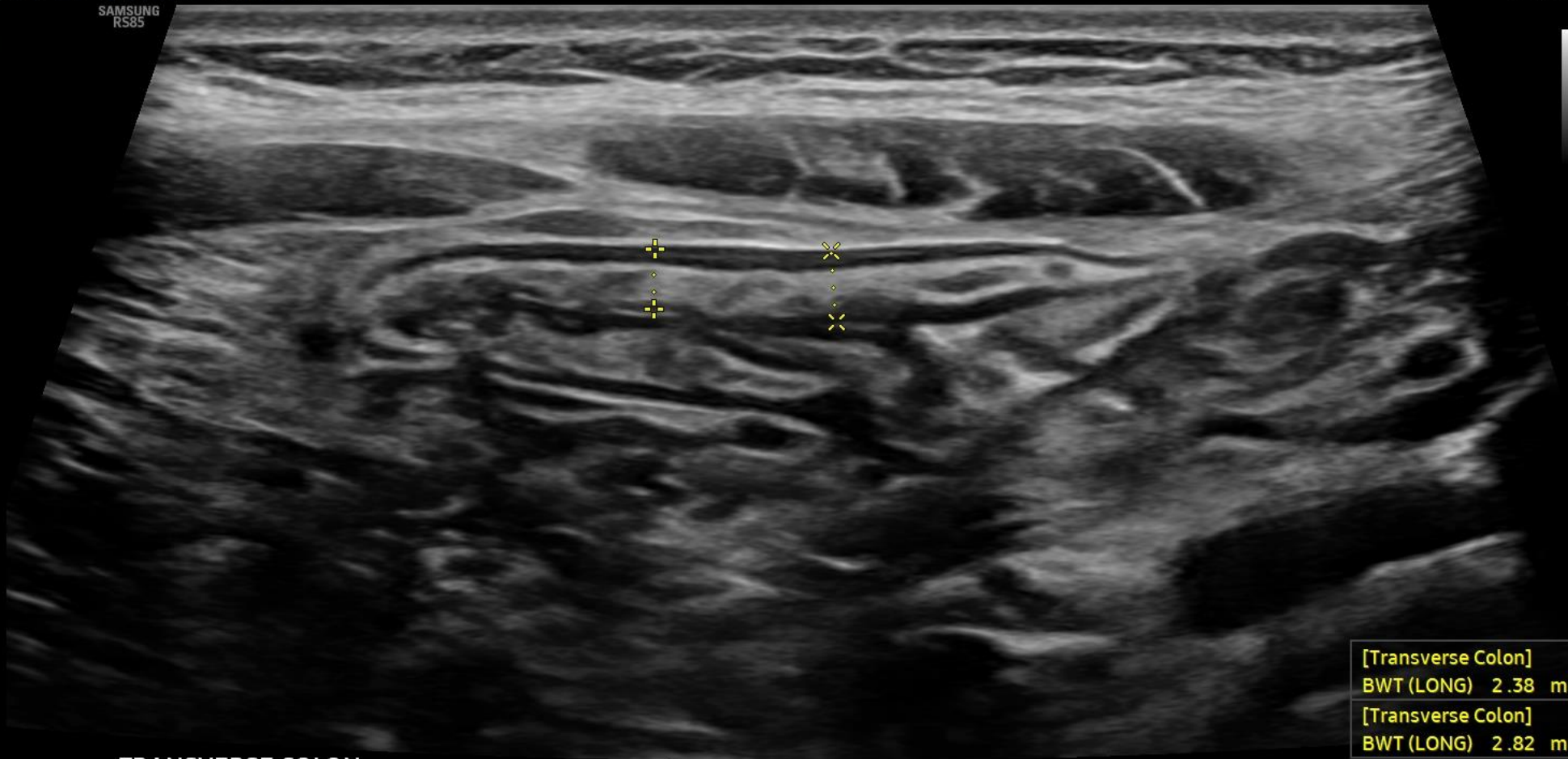
Frq Res.1

GN 69

DR 49

FA 8

P 100



TRANSVERSE COLON

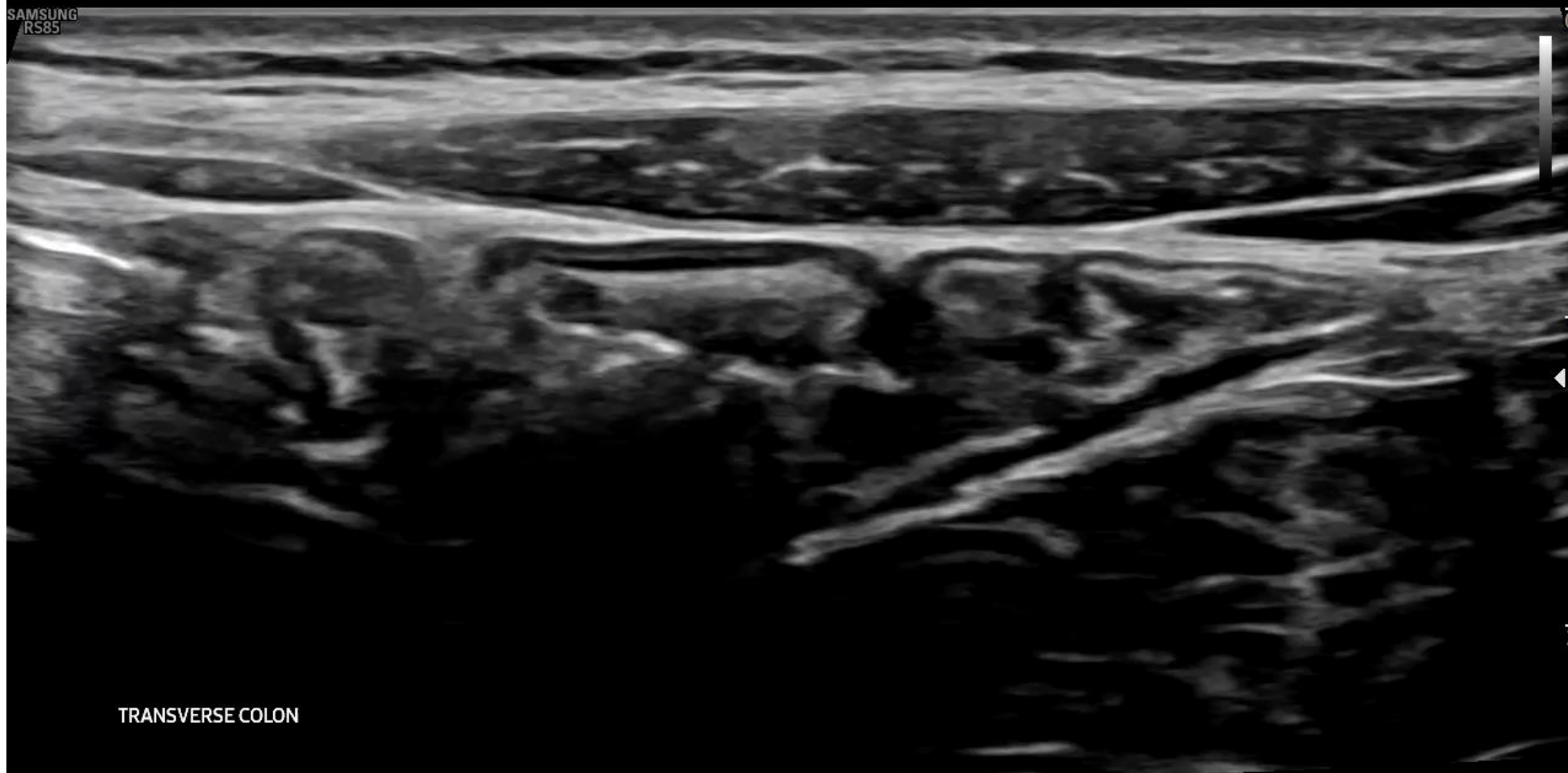
[Transverse Colon]
BWT (LONG) 2.38 mm
[Transverse Colon]
BWT (LONG) 2.82 mm



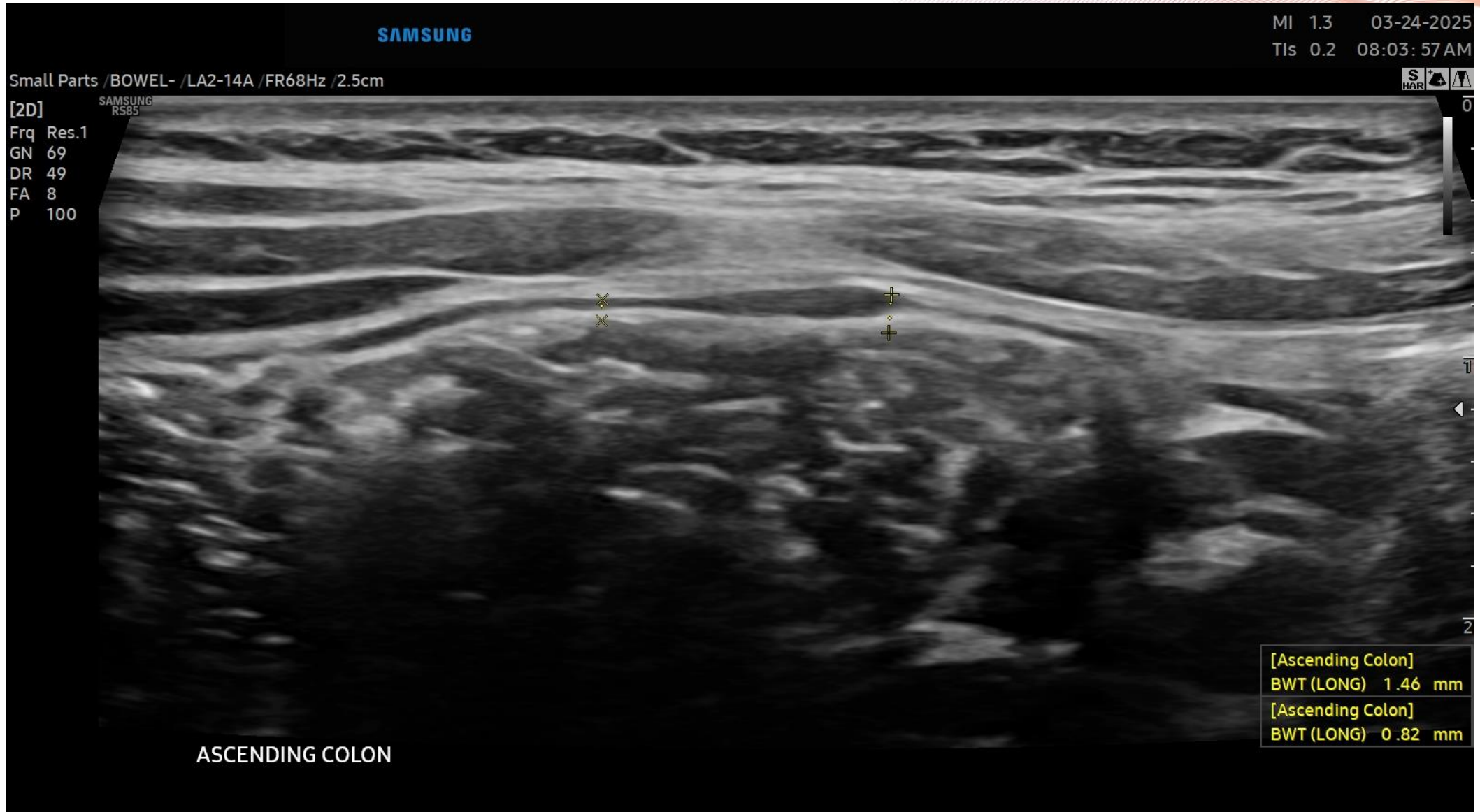
Small Parts / BOWEL- / LA2-14A / FPS68 / 2.5cm / MI1.3 / TIs0.2 / 03-24-2025 08:03:12 AM
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TRANSVERSE COLON





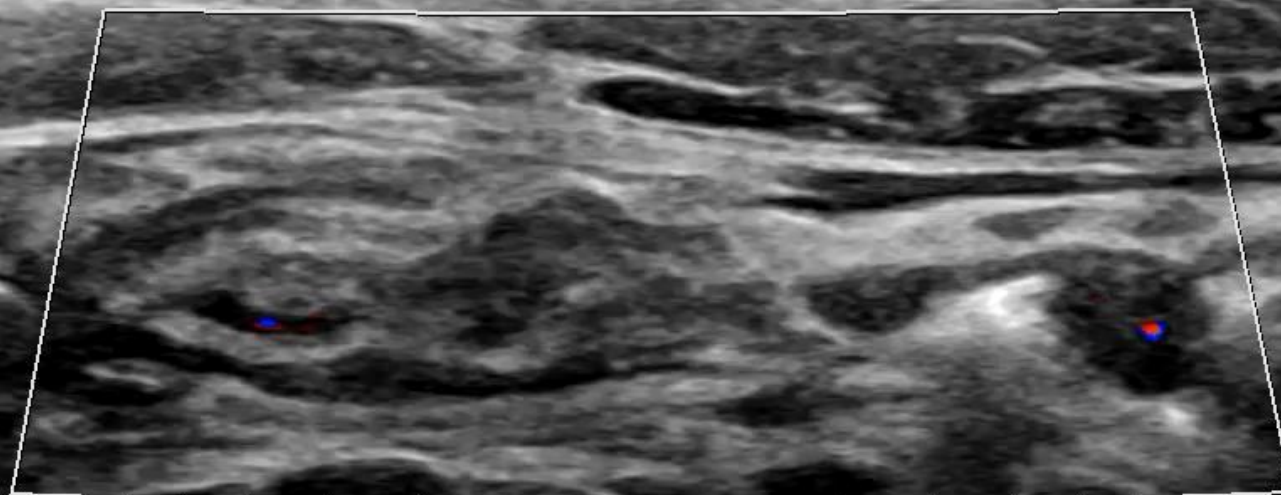
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[PD] Frq Gen. / GN 61 / 0.80kHz / P 100



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5.2
0
-5.2
cm/s

CECUM

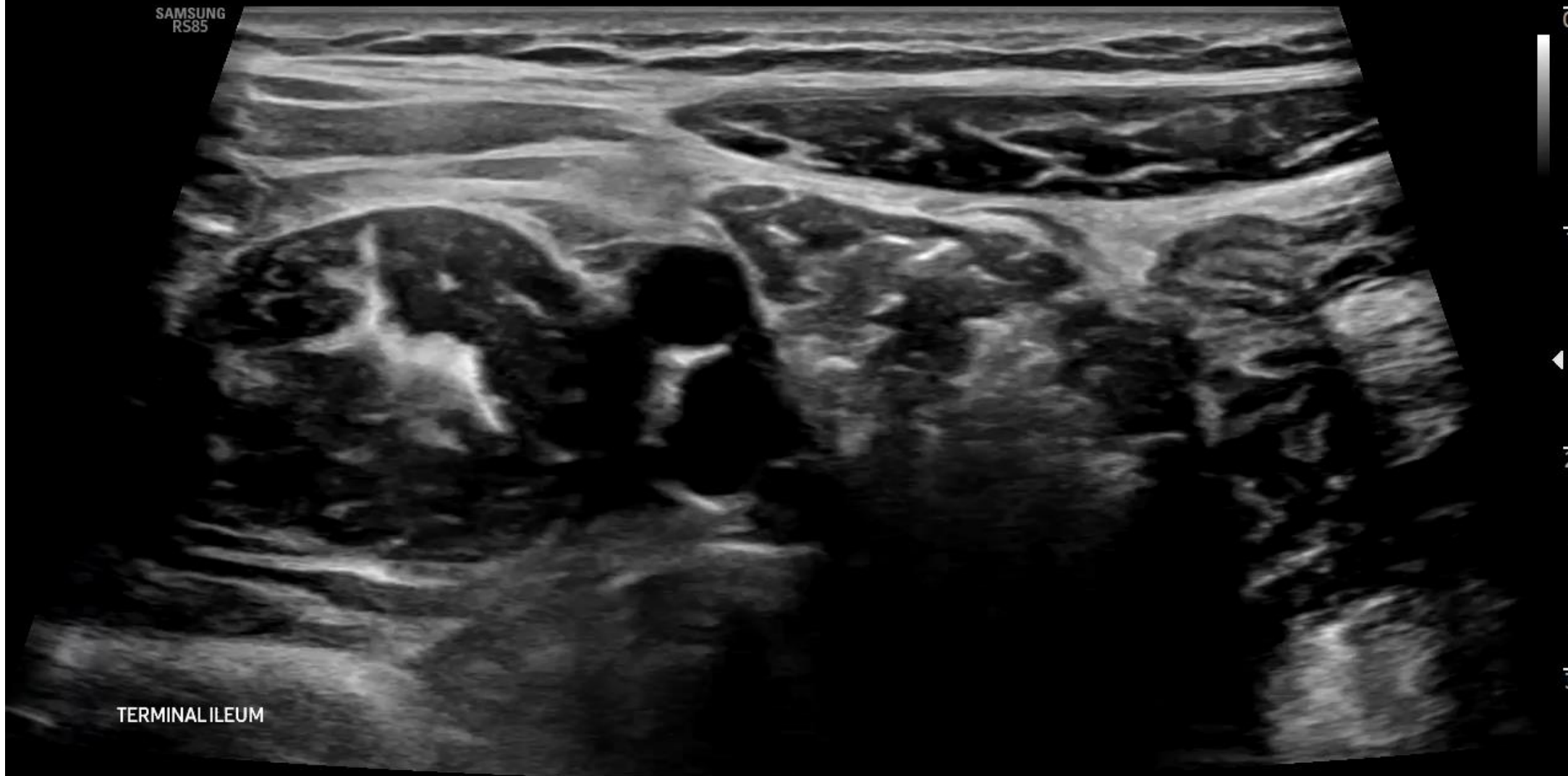


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RS85

TERMINAL ILEUM





Small Parts / BOWEL- / LA2-14A / FPS19 / 3.0cm / MI1.3 / TIs0.6 / 03-24-2025 08:06:33 AM

[2D] Frq Res.1 / GN 69 / DR 49 / FA 4 / P 100

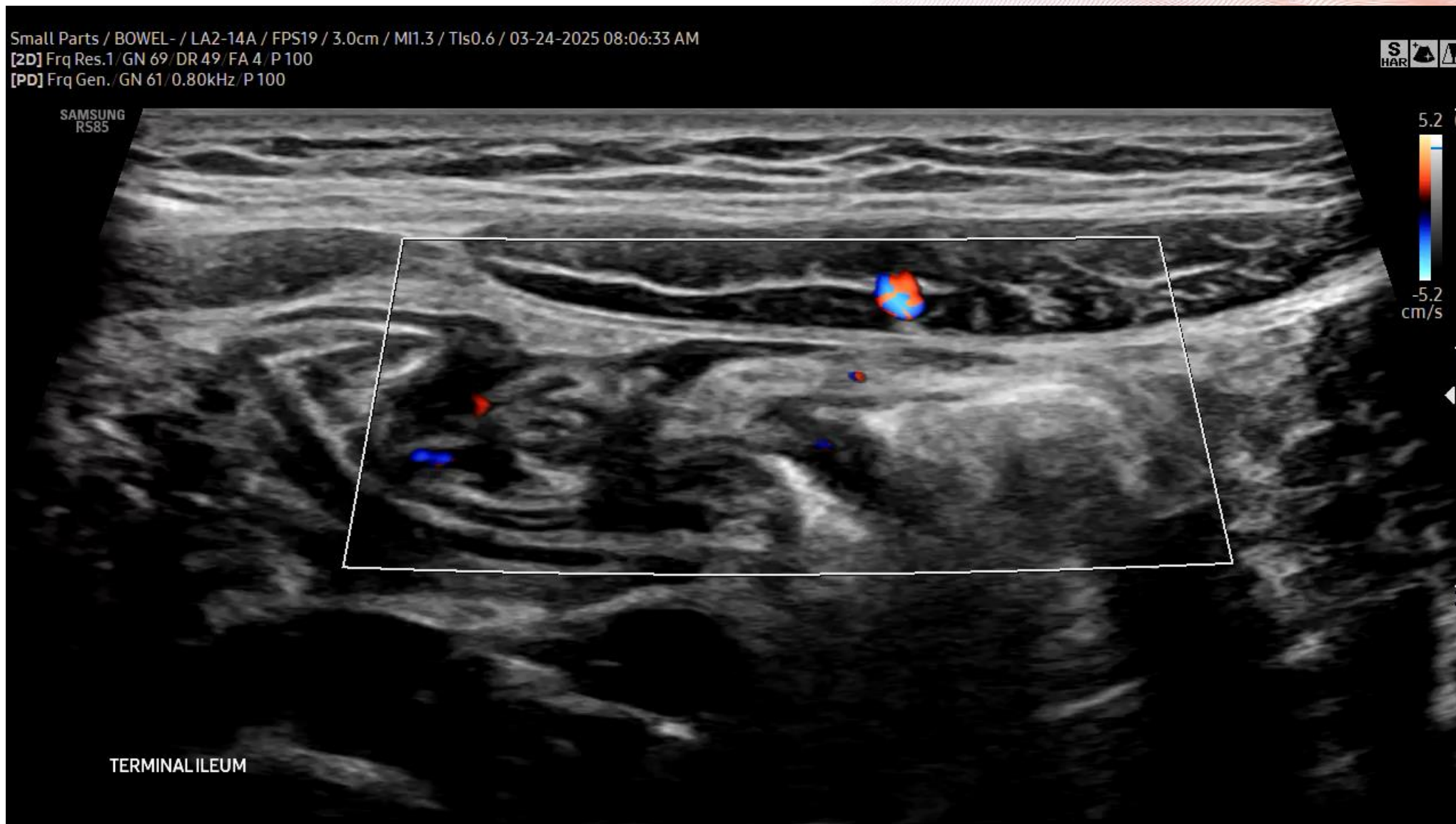
[PD] Frq Gen. / GN 61 / 0.80kHz / P 100



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RS85

5.2 0
-5.2
cm/s

TERMINAL ILEUM





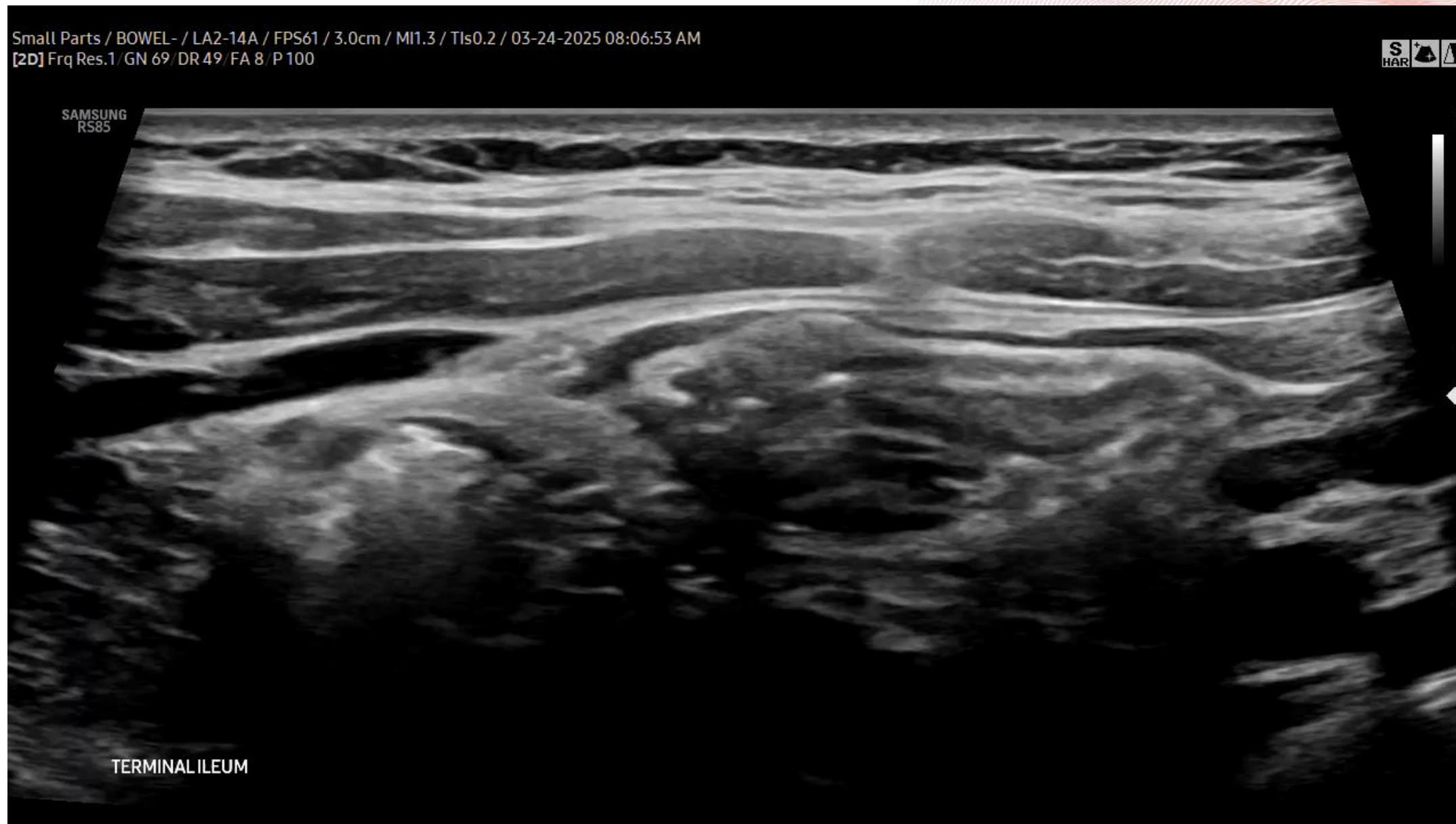


Small Parts / BOWEL- / LA2-14A / FPS61 / 3.0cm / MI1.3 / TIs0.2 / 03-24-2025 08:06:53 AM
[2D] Frq Res.1 / GN 69 / DR 49 / FA 8 / P 100



SAMSUNG
RS85

TERMINAL ILEUM





Small Parts / BOWEL - / LA2-14A / FPS19 / 2.5cm / MI0.98 / TI0.6 / 03-24-2025 08:07:21 AM

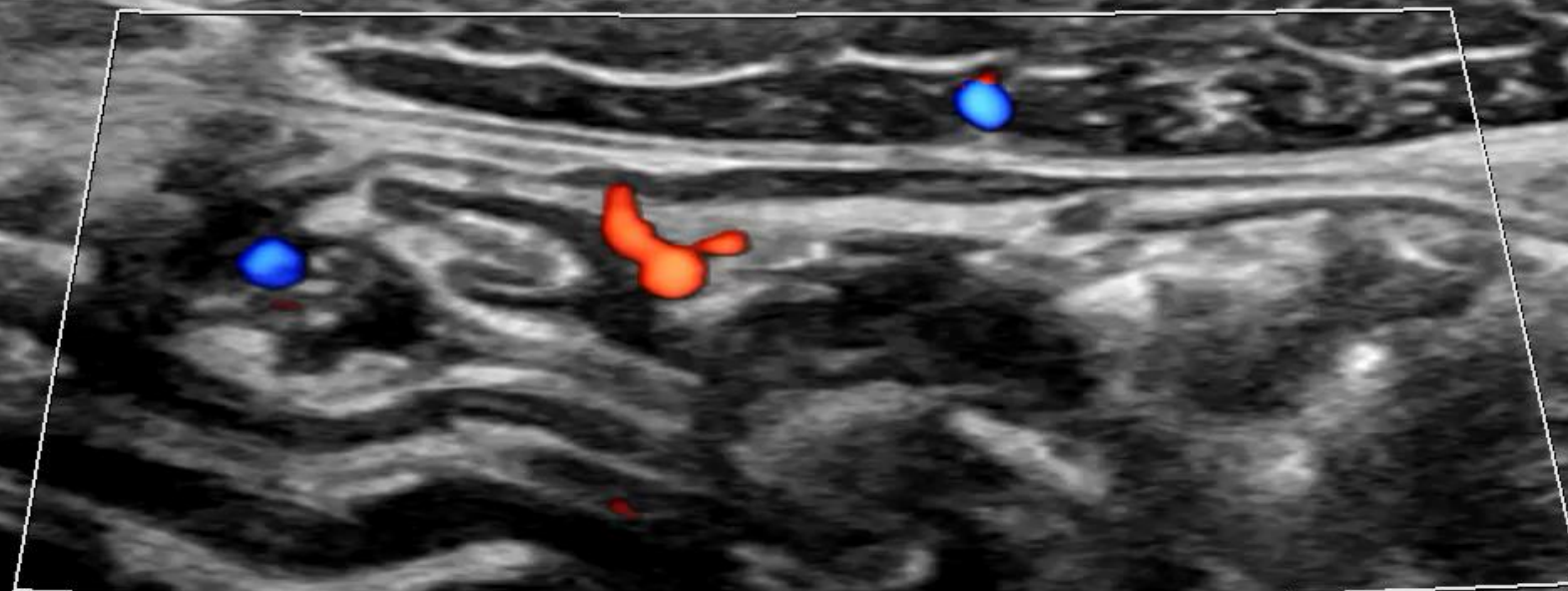
[2D] Frq Res.1 / GN 69 / DR 49 / FA 4 / P 100

[PD] Frq Gen. / GN 61 / 0.80kHz / P 100



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RS85

5.2
0
-5.2
cm/s



TERMINALILEUM



What Would You Do Next Now?

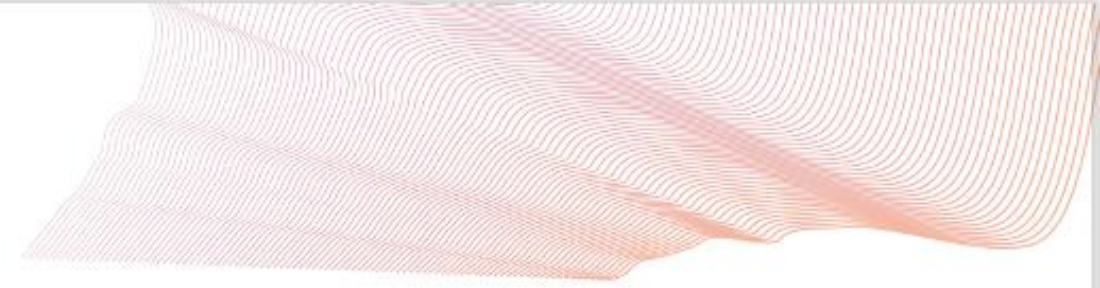
Additional Tests

She refuses to undergo any additional lab evaluation

Stool studies

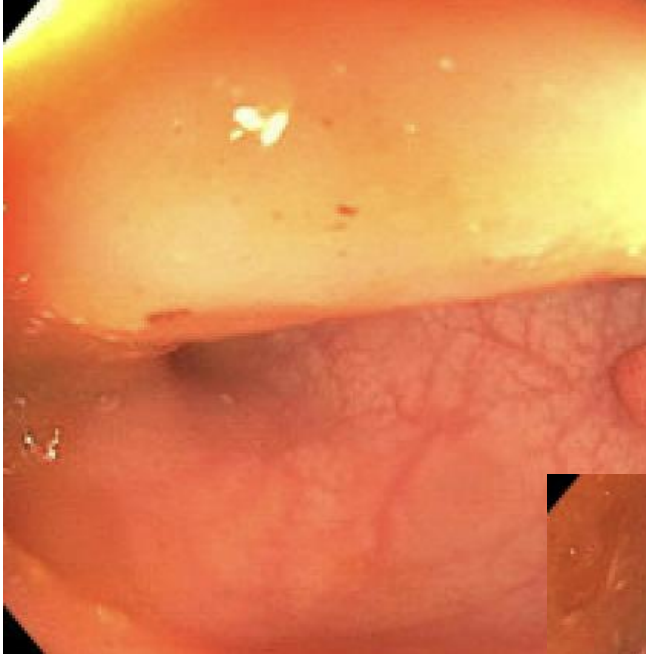
- GI PCR Panel negative
- C.diff PCR negative

Component	3/27/25 1321	
Ref Range & Units		
CALPROTECTIN, FECAL	1,820 ^	
0 - 120 ug/g		
Comment:	**Results verified by repeat testing**	
Concentration	Interpretation	Follow-Up
< 5 - 50 ug/g	Normal	None
>50 -120 ug/g	Borderline	Re-evaluate in 4-6 weeks
>120 ug/g	Abnormal	Repeat as clinically indicated



Endoscopy and Colonoscopy

Colonoscopy



Final Diagnosis

A. Colon, descending, polyps, hot snare polypectomy:
- Inflammatory/juvenile polyps, see comment

B. Colon, transverse, polyp, hot snare polypectomy:
- Inflammatory/juvenile polyp, see comment

C. Colon, cecum, polyp, hot snare polypectomy:
- Inflammatory/juvenile polyp, see comment

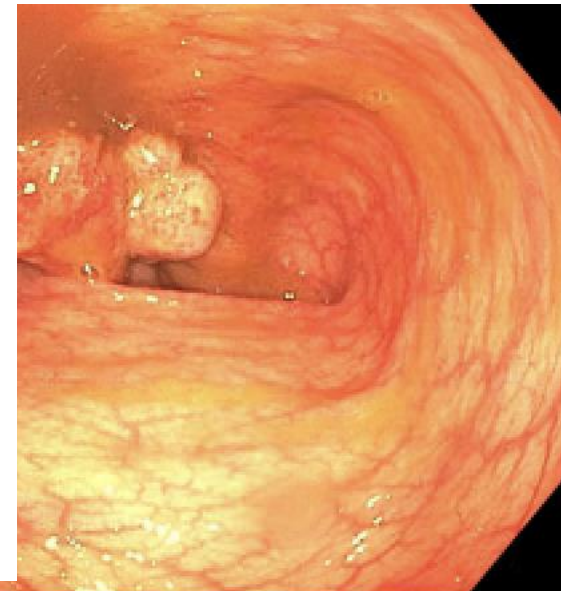
D. Rectal polyp, hot snare polypectomy:
- Inflammatory/juvenile polyp, see comment

E. Colon, hepatic flexure, hot snare polypectomy:
- Inflammatory/juvenile polyp, see comment

Comment: The number and distribution of inflammatory/juvenile polyps throughout the colon raises consideration for juvenile polyposis syndrome (JPS).

F. Duodenum, biopsy:
- Duodenal mucosa within normal limits, including preserved villous architecture and no increased intraepithelial lymphocytosis
- No pathogenic microorganisms or parasites identified

G. Esophagus, distal, biopsy:
- Esophageal squamous epithelium with rare intraepithelial eosinophils (1-2/hpf) and mild reactive changes



Key Takeaways

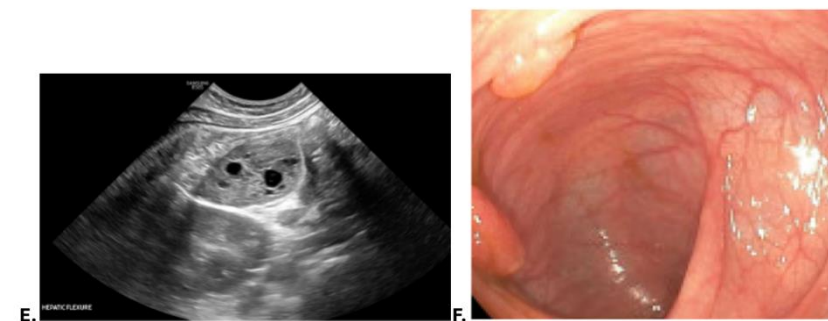
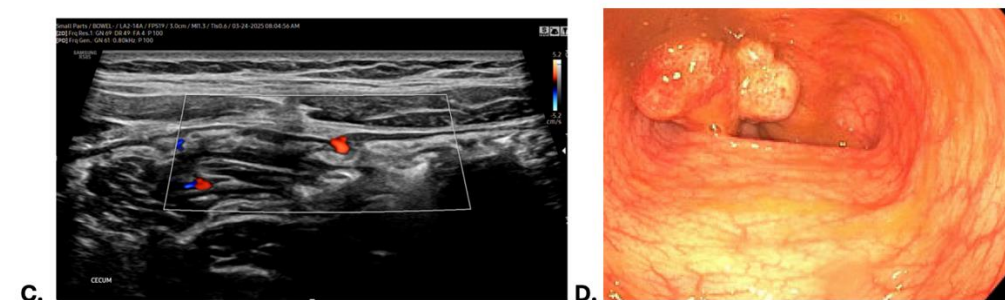
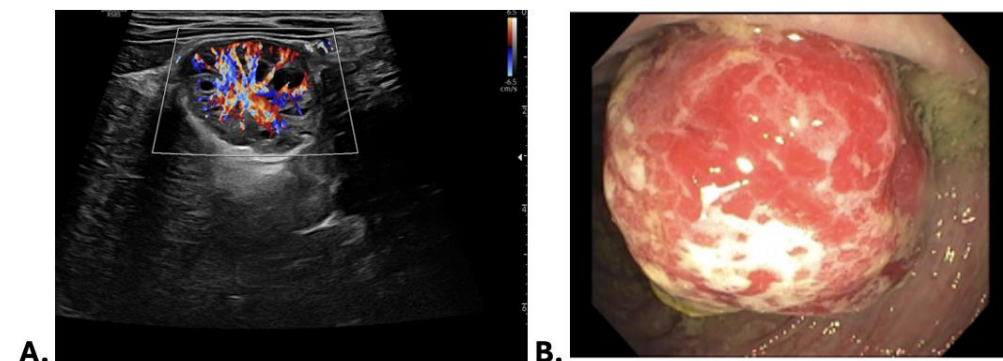
Protruding polyps in children often present with visible transmural changes on IUS that can mimic IBD

Systematic approach is key

Children age ≤ 6 may have difficulty cooperating or sitting still

Abnormalities on diagnostic screening IUS should prompt earlier endoscopy and colonoscopy for further diagnostic evaluation

Case Series: IUS as a Diagnostic Tool for Polyps

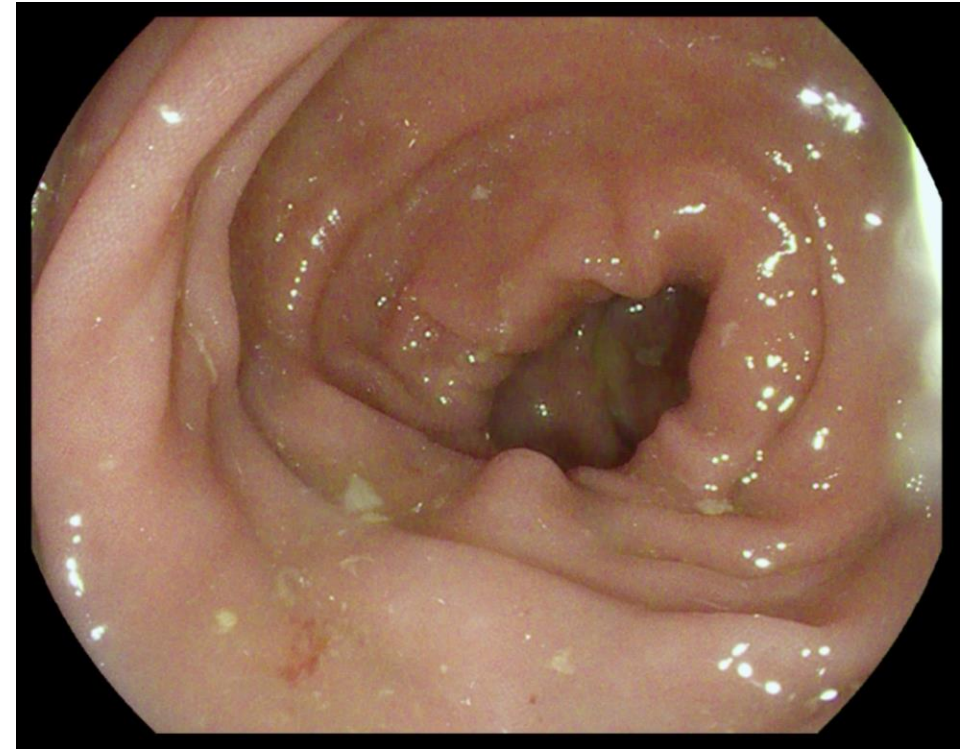
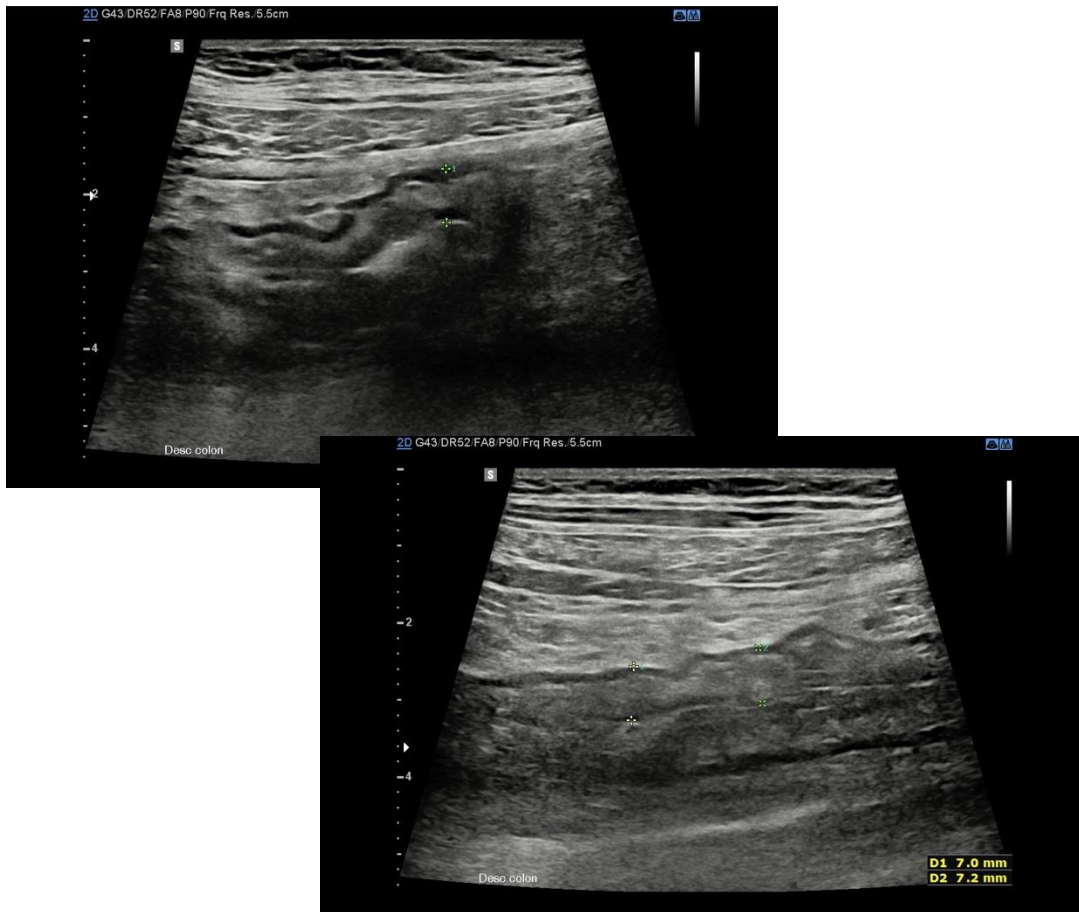


Case 2: 37 Year old Male with CVID and Cancer

- 37 M with CVID including secondary sclerosing cholangitis s/p liver transplant
 - 3rd blood cancer
 - Now involving the bowel (NK/T LGL)

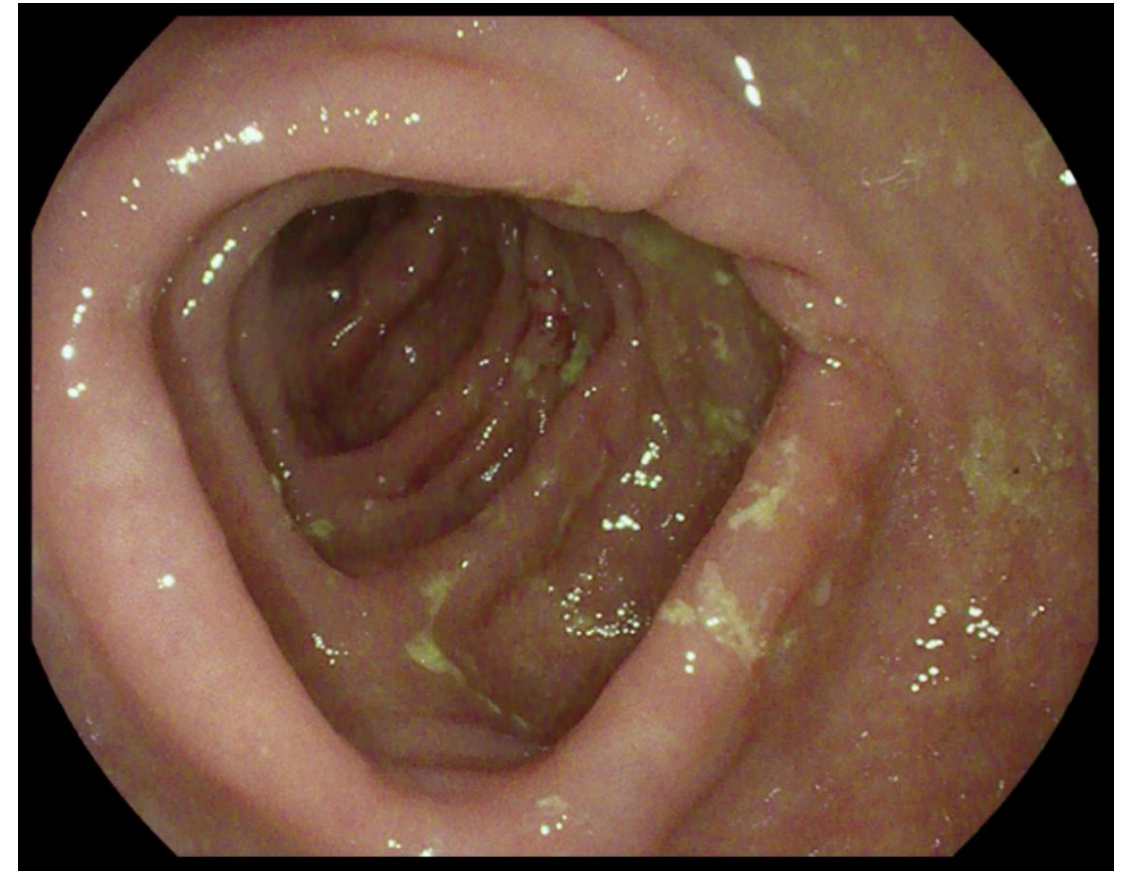
IUS and Colonoscopy Findings

Descending Colon



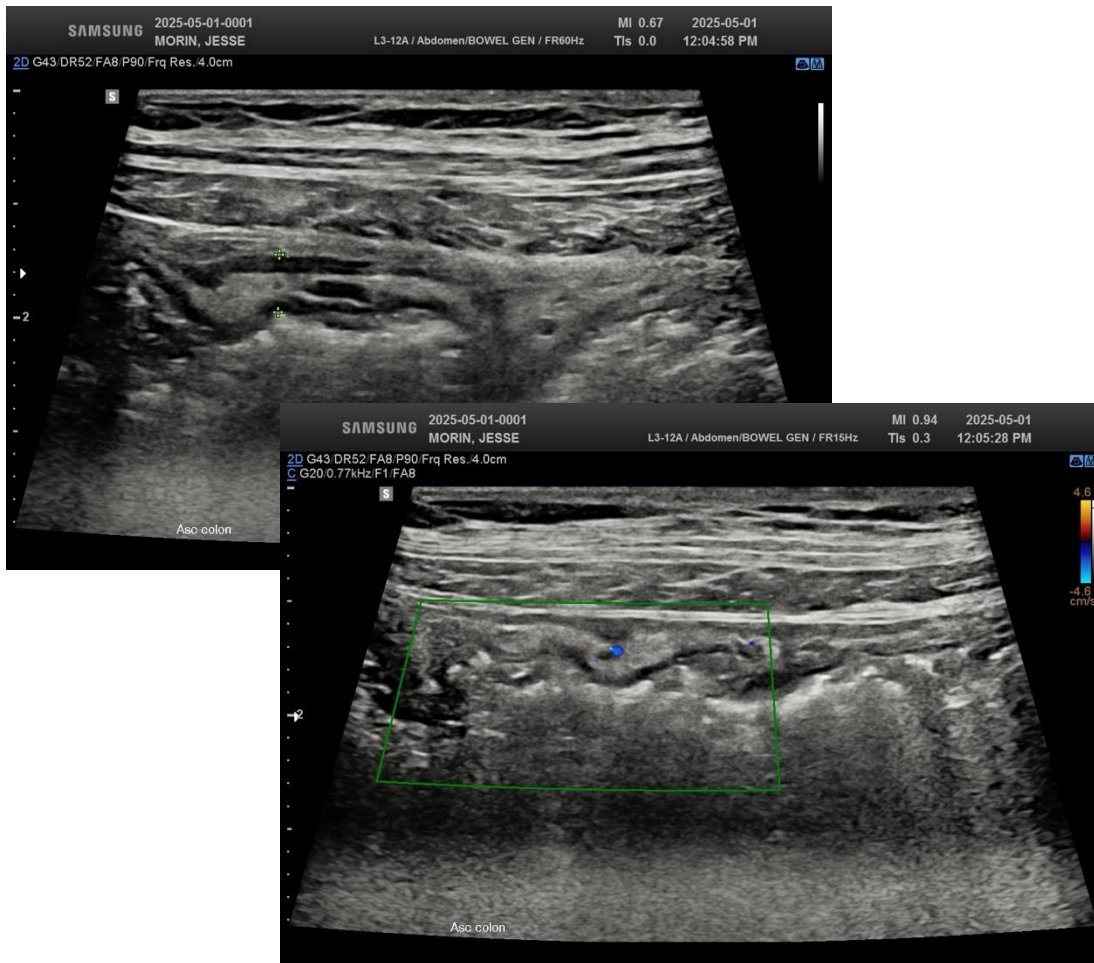
IUS and Colonoscopy Findings

Transverse Colon

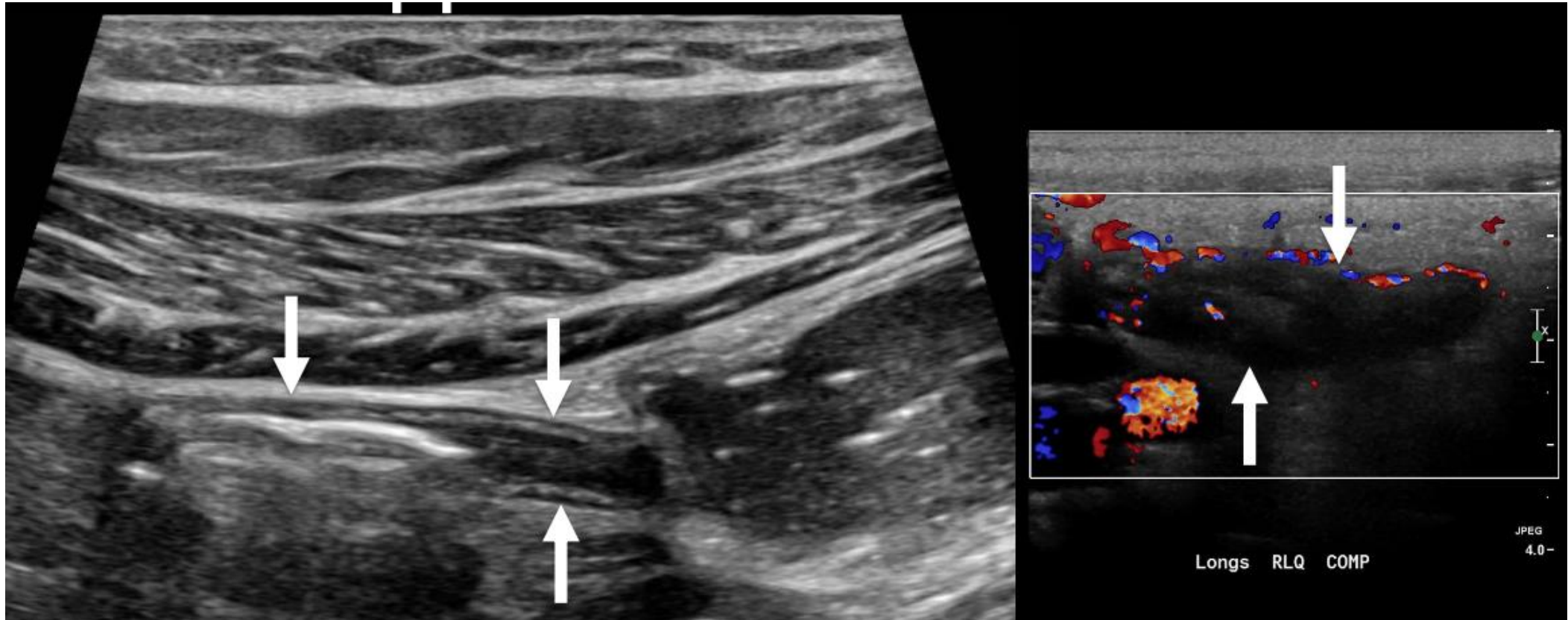


IUS and Colonoscopy Findings

Ascending Colon/Cecum



Acute Appendicitis



Meckel Diverticulitis



Other Non-IBD Common Pathologies

- Mesenteric Adenitis
- HSP (Vasculitis)
- Infection (Viral, Bacterial)
- Diverticulosis and Diverticulitis
- Intussusceptions
- Malignancy