



# IUS in UC: What is Your Diagnosis?

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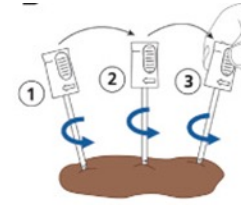


# The Flaring Ulcerative Colitis Patient

# 37 y M with a history of left sided ulcerative colitis on 5-ASA for 3 years



- 8 bloody diarrheal bowel movements daily
- 2 nocturnal bowel movements
- Cramping abdominal pain prior to bowel movements
  - Decreased appetite



FC = Pending  
GI PCR Panel  
negative  
C.Diff negative

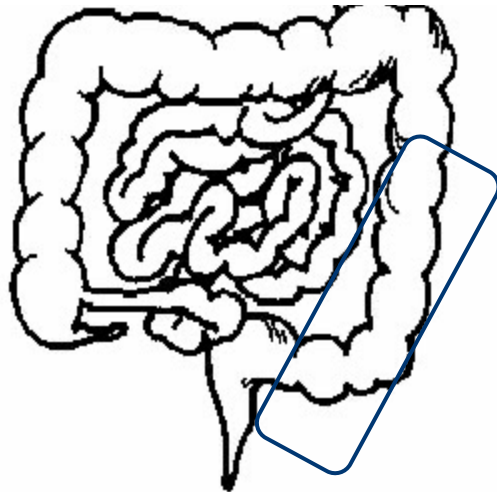


Pending

# Most Recent colonoscopy 11 months ago shows left sided colitis



Mayo 2 to 30 cm in the left colon



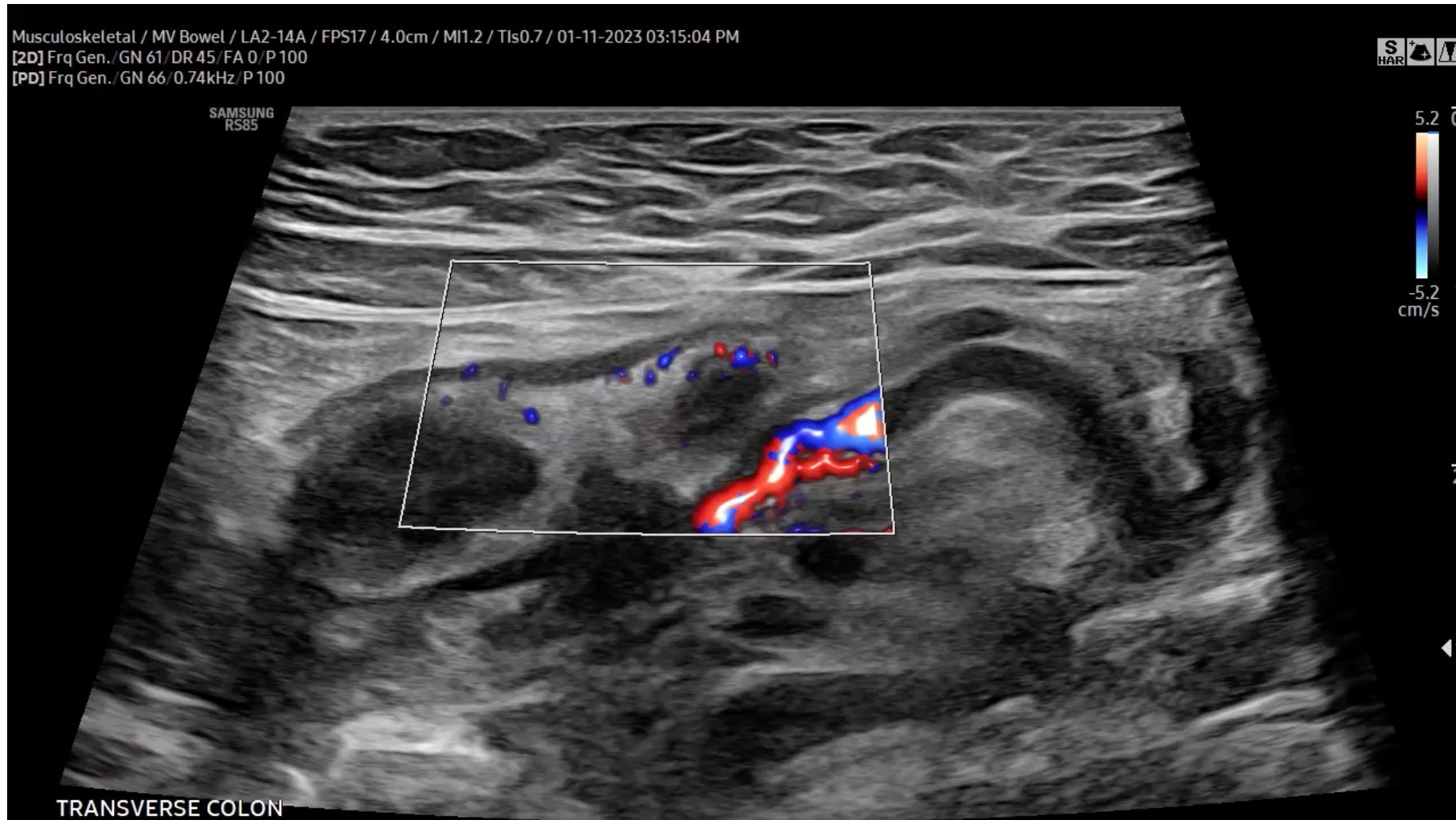
# What do you see?





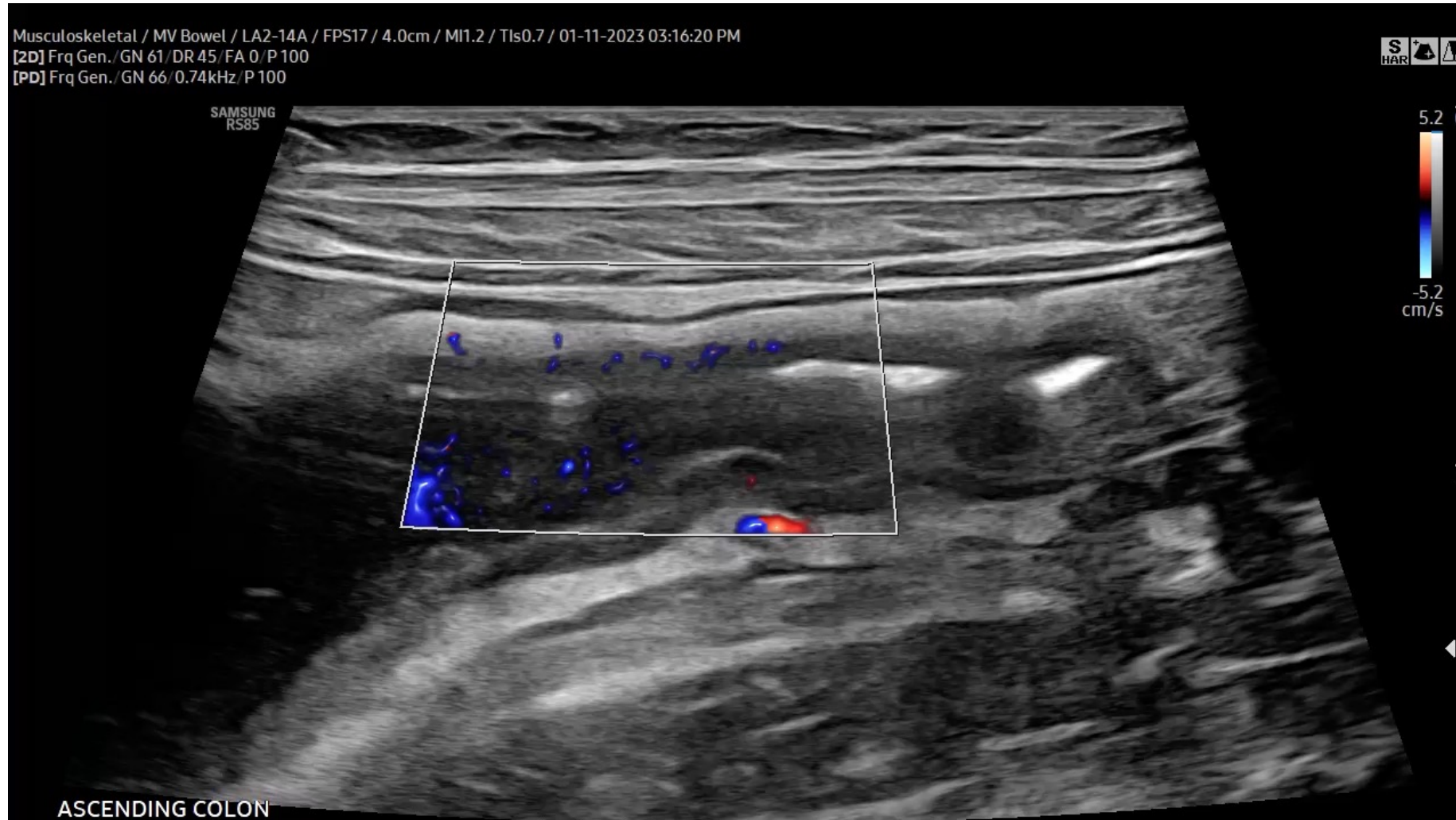


# What do you see?





# What do you see?





# **New Assessment based solely on IUS**

**37 y M with disease extension and moderate to severely active ulcerative colitis**



# Case Presentation

- 5 y/o M diagnosed with VEO-IBD as pancolitis (Patchy Mayo 2) in April 2023
- Tx: Sulfasalazine
- Achieved steroid-free clinical remission by July 2023
- T2T colonoscopy January 2024: Persistent left-sided Mayo 2 colitis
- Plan made to start primary ustekinumab

# Symptomatic Flare 1 Week Later

- Develops URI symptoms over the weekend
- + Rhino/enterovirus at the pediatrician
- 5-7 loose, urgent, bowel movements per day
- 50% with blood
- Occasional nocturnal stool
- Early morning tenesmus and cramping abdominal pain prior to BM

# Outside Hospital Course

- Short 3-day admission
- Plan switched and given 1 dose of 10 mg/kg of infliximab
- No IV or PO steroids given
- Discharged home the following day with a mild improvement in symptoms and without steroids



## 2<sup>nd</sup> IFX 2-weeks later

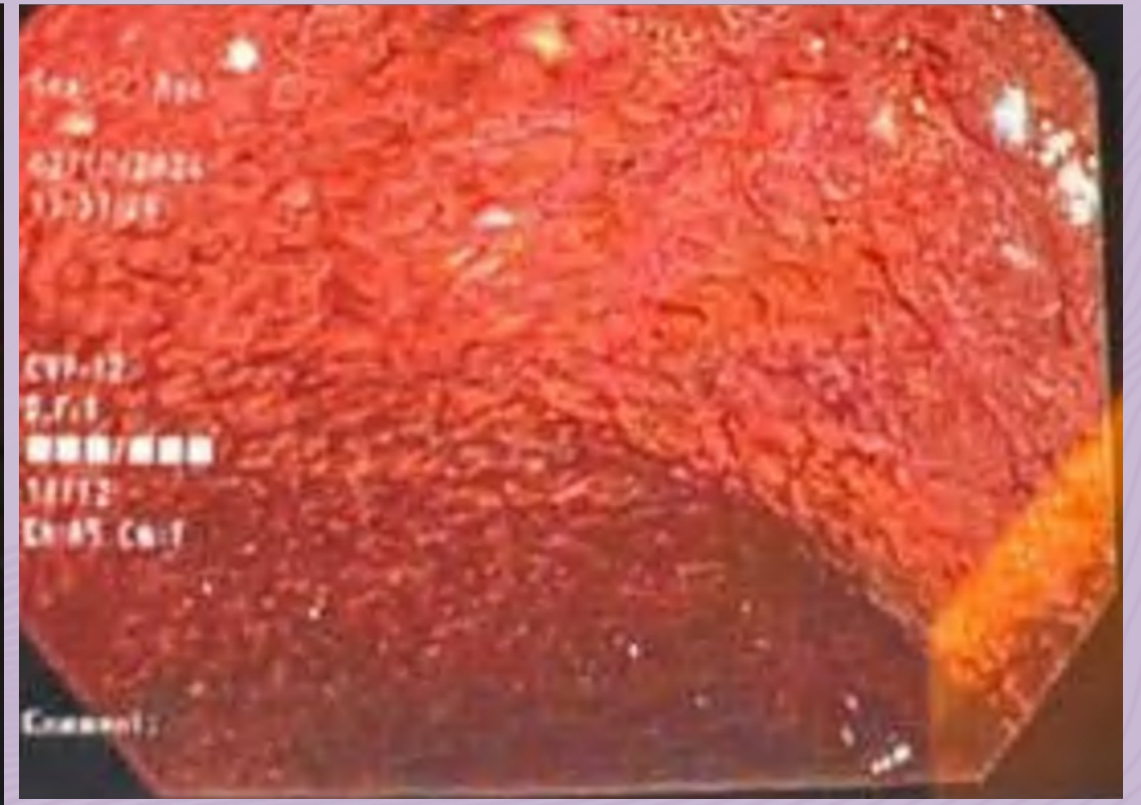
- Remains symptomatic
- Worsened since discharge
- Found to have a hemoglobin of 7.1
- Admitted again for further management

# 2<sup>nd</sup> Hospital Admission

- Started on IV solumedrol
- Given 2<sup>nd</sup> IFX 10 mg/kg dose at day 14 post-induction
- Transfused 10 cc/kg of pRBCs
- C.Diff PCR positive but EIA negative on admission
  - Started on IV metronidazole
- No symptomatic improvement so given 3<sup>rd</sup> IFX dose at 10 mg/kg 3 days later



# Day 5 Flexible Sigmoidoscopy





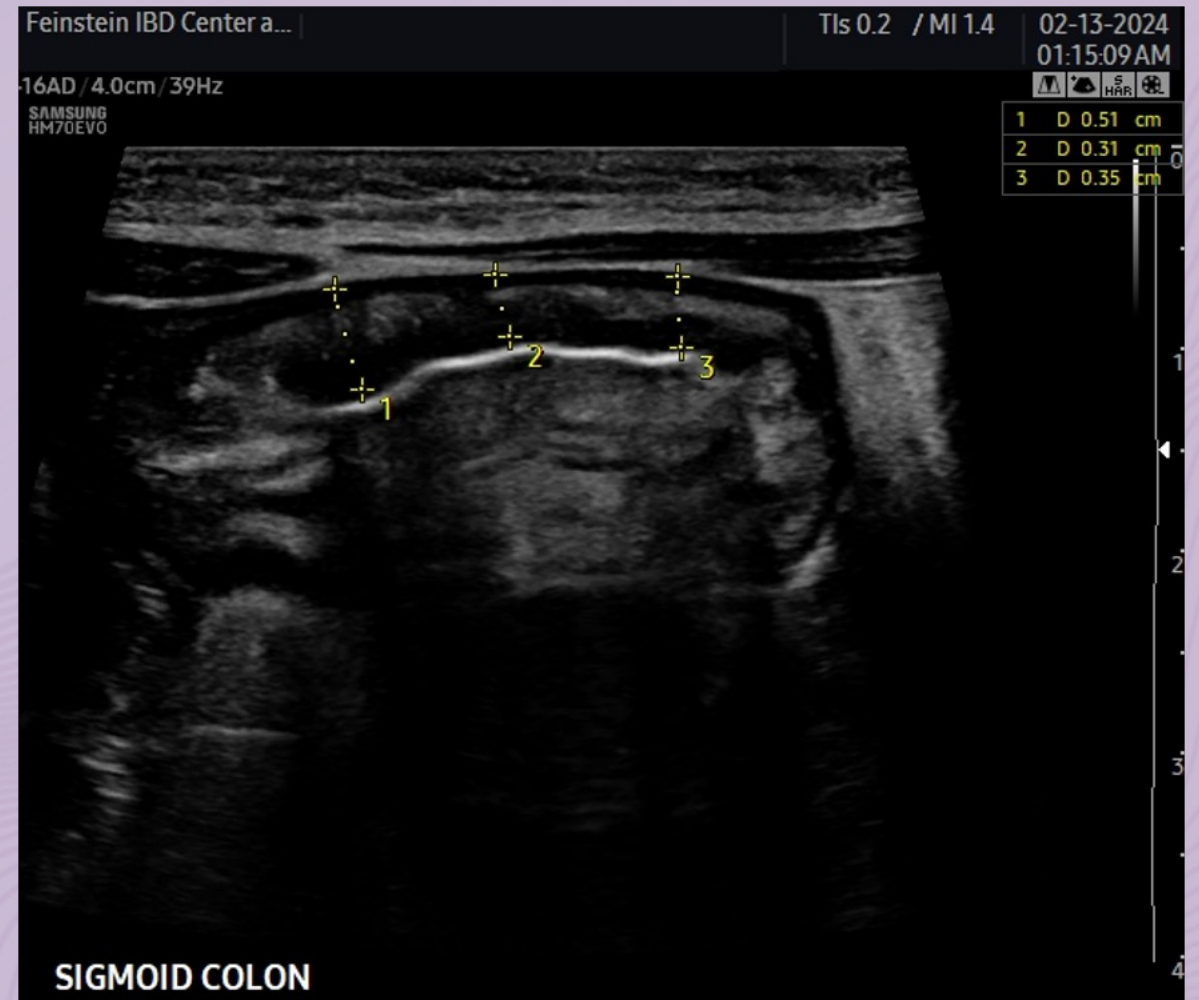


# Clinical Status on Arrival

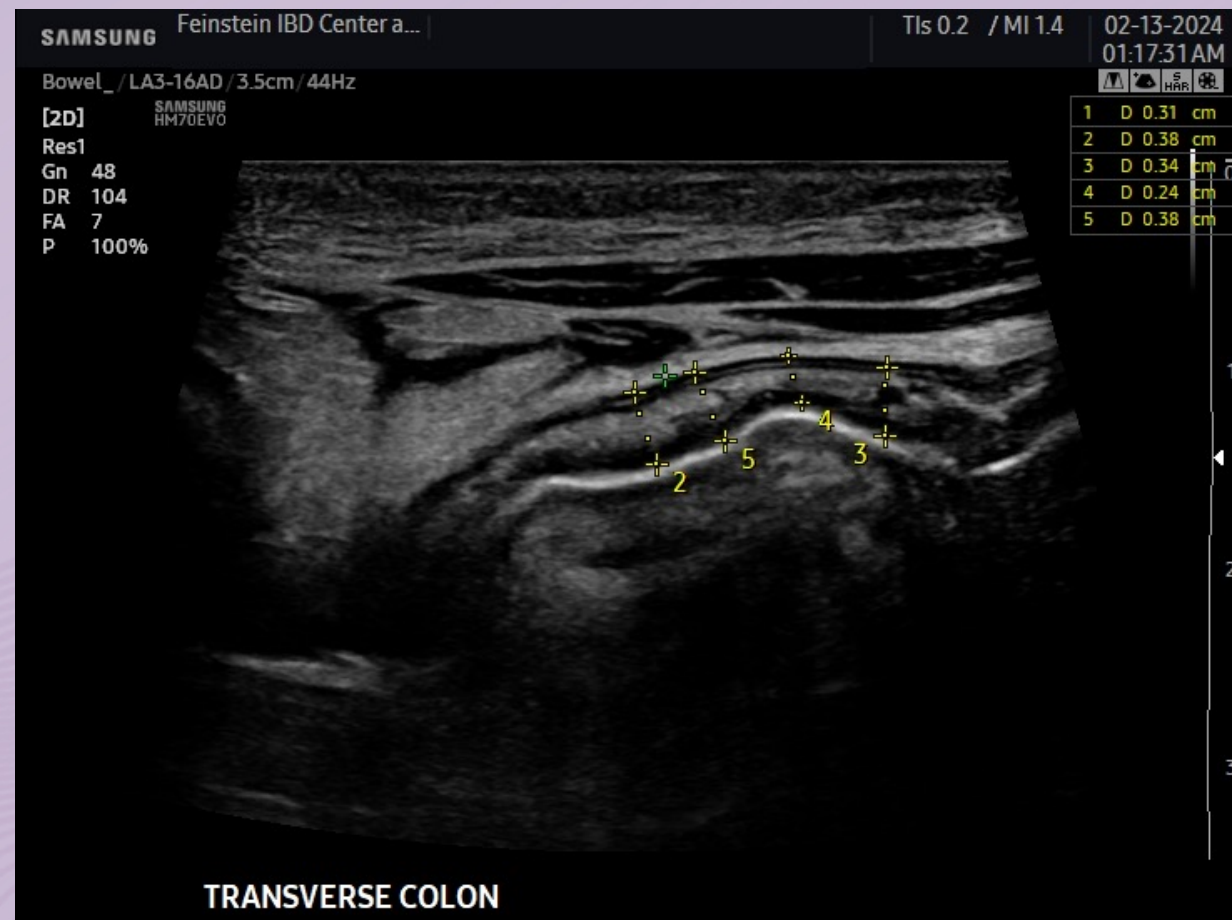
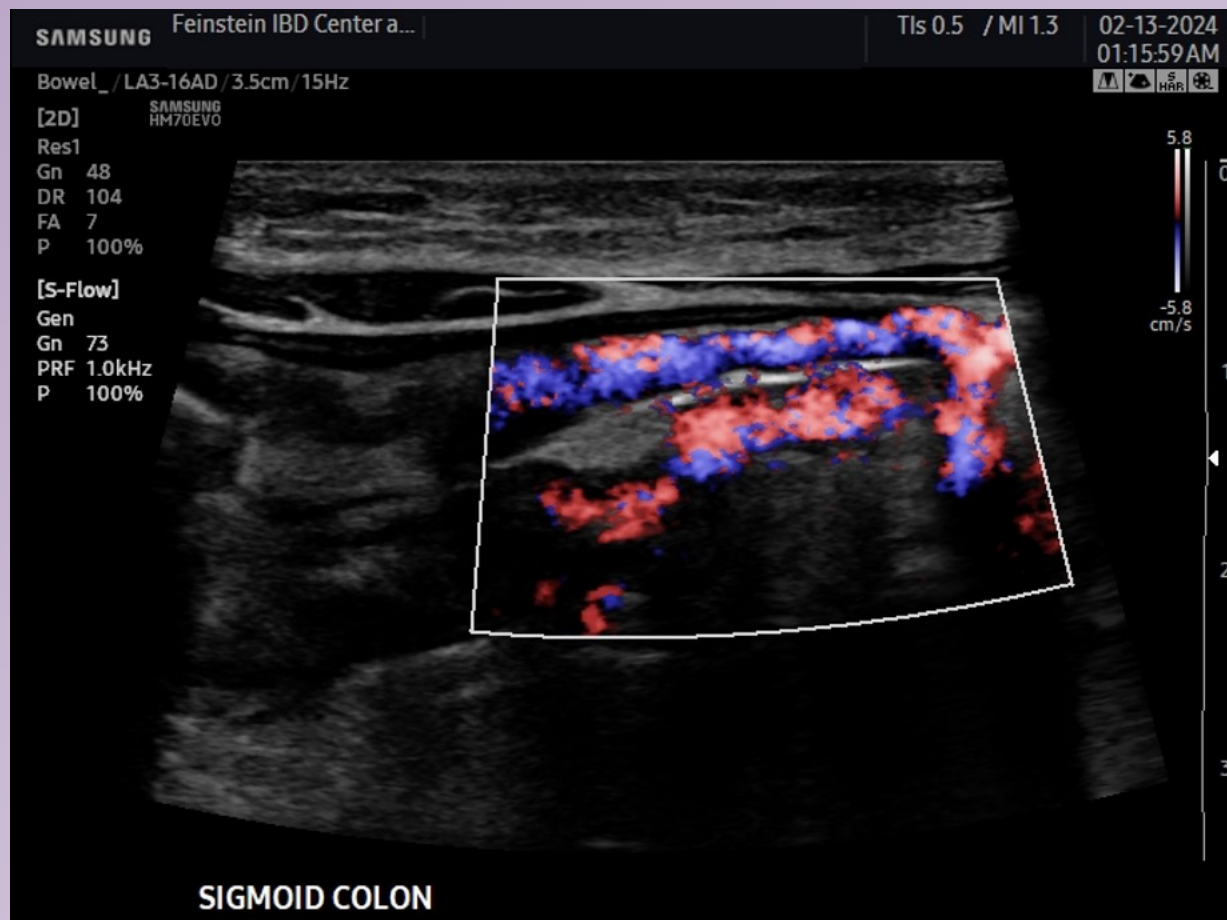
- 12 bloody bowel movements daily
- 3 Nocturnal Urgency
- PUCAI 70
- WBC 38.4
- Hgb 7.2
- Plt 743
- Alb 1.4
- ESR < 2
- CRP 5.6 mg/L
- IFX level 12, no ATI
- IFX 10 mg/kg x 2 over 3 days
- 6 days of IV solumedrol
- 5 days of IV flagyl
- PPN



# Intestinal Ultrasound - Day 0/7



# Intestinal Ultrasound - Day 0/7







# Intestinal Ultrasound Day 0/7



**TRANSVERSE COLON**



# Treatment

**Either Liquid Tofacitinib or Upadacitinib Pill**

**Taught how to swallow pills with candy M+Ms**

**Started on upadacitinib 30 mg that evening (22 kg) of day  
0**



# Clinical and Laboratory Response

**Clinical improvement beginning at 36 hours post Upa initiation**

**5 bowel movements, > 75% blood, 1 nocturnal bowel movement**

**PUCAI 55**

**WBC 19.4**

**Hgb 11.7 (s/p pRBC x 1 for hgb of 6.1)**

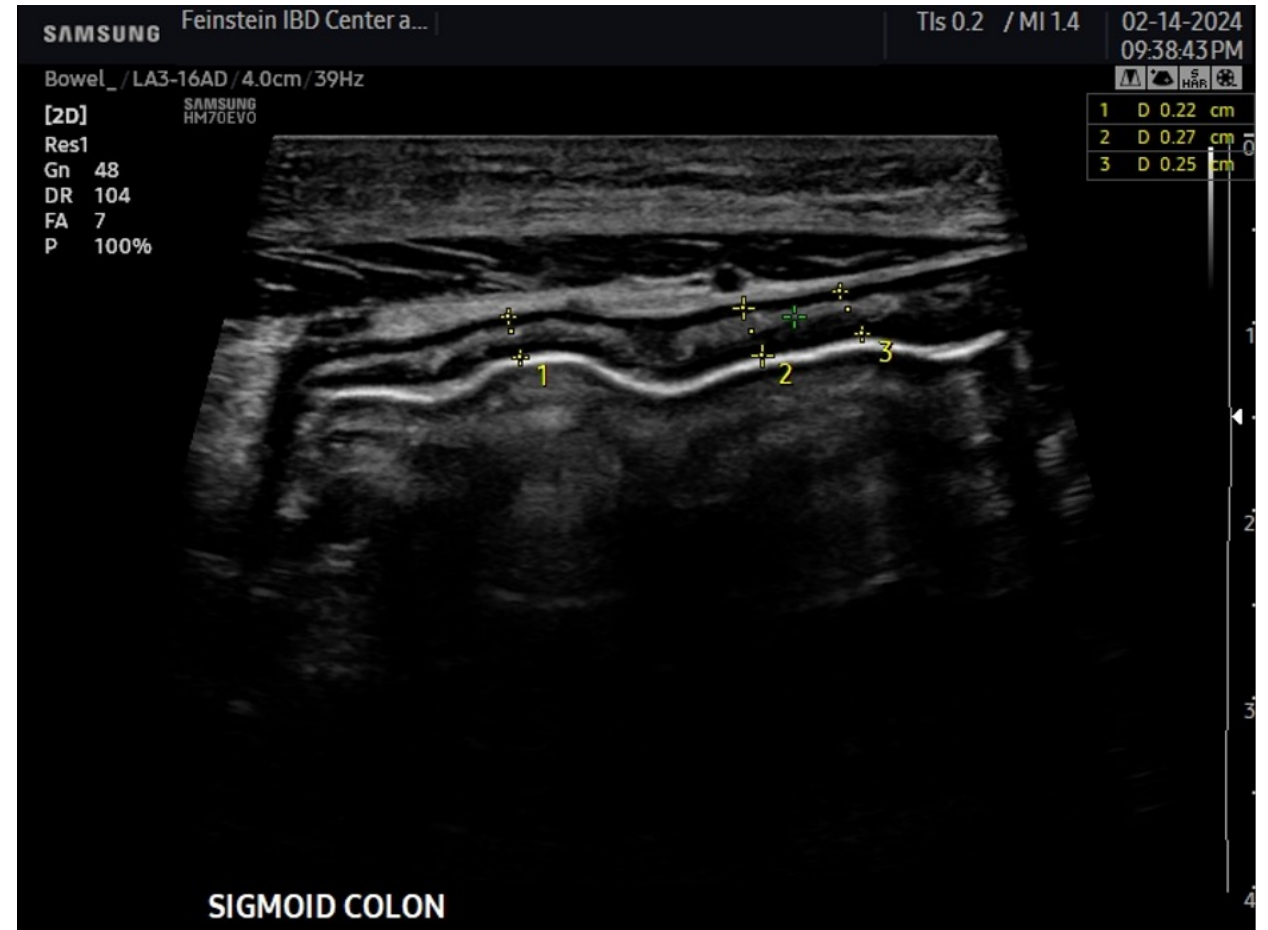
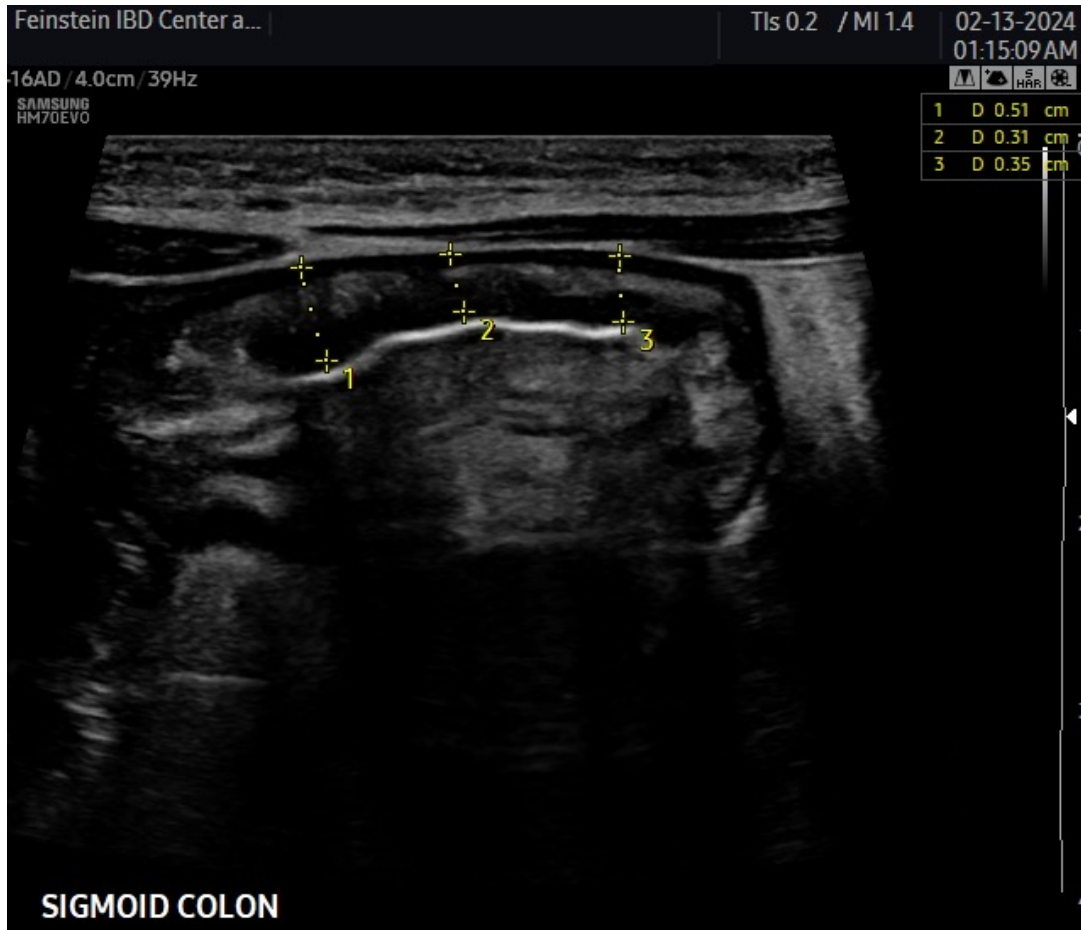
**Plt 555**

**Alb 1.8**

**CRP < 3.0 mg/L**

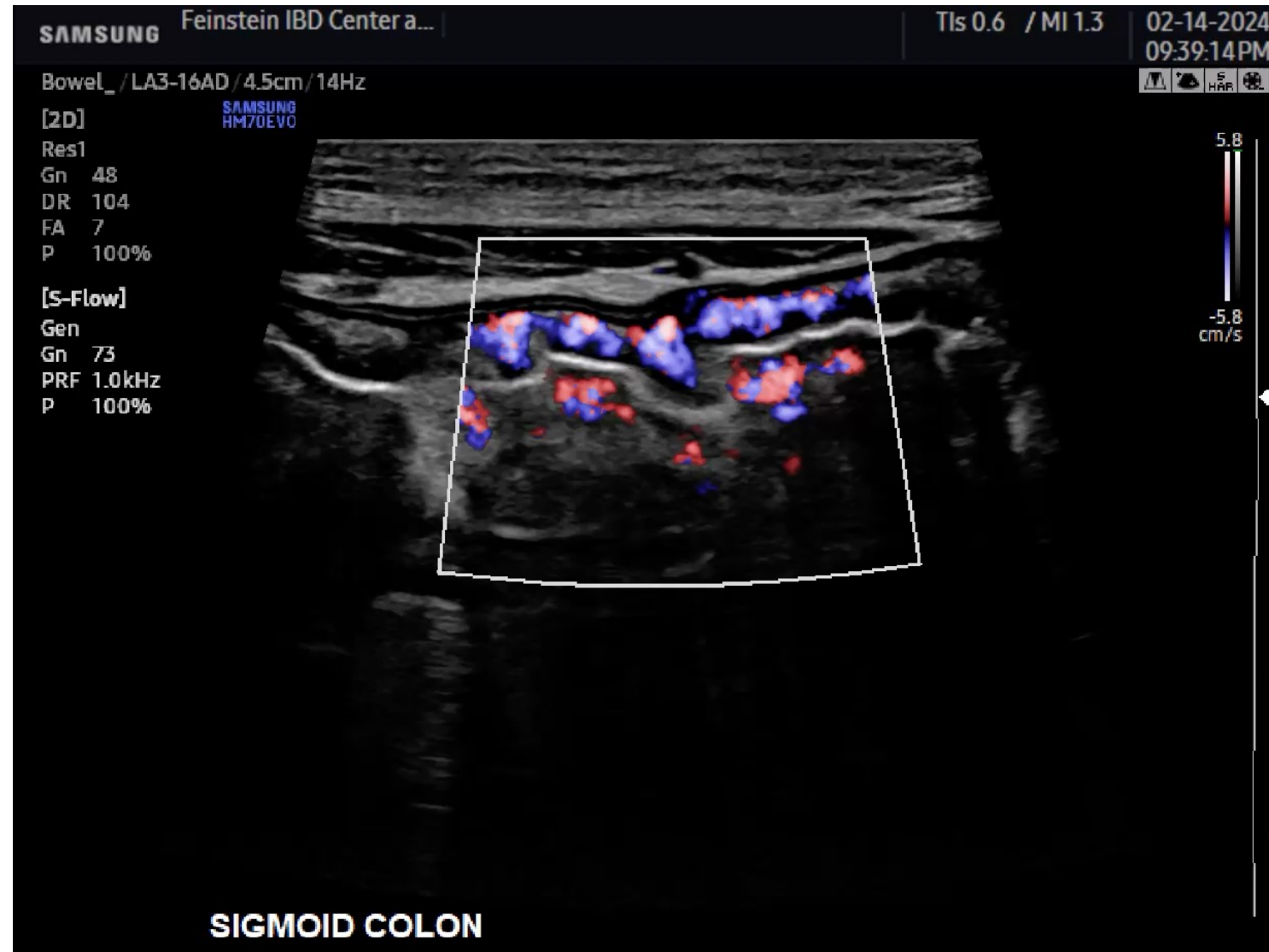


# IUS at 45 Hours





# IUS at 45 Hours





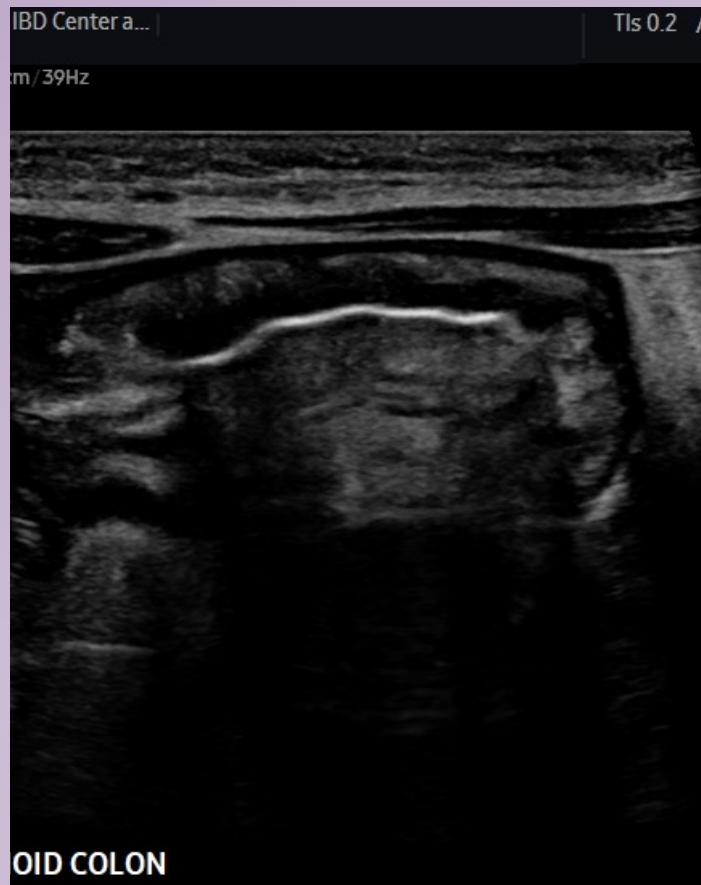


# Continued Clinical Response

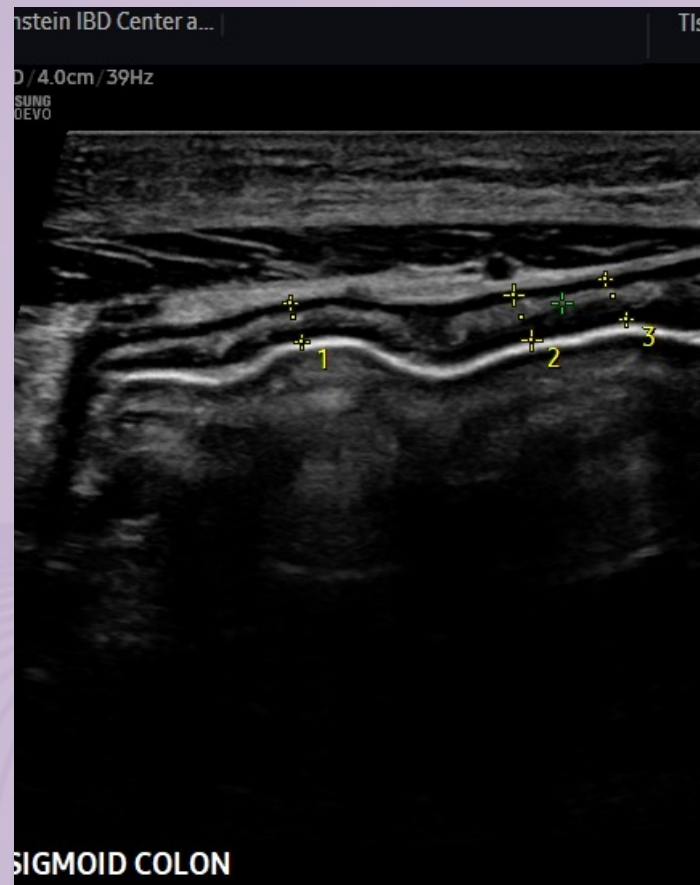
**Switched from IV to PO steroids on day 3**  
**2 formed bowel movements without blood on day 4**  
**No nocturnal bowel movements**  
**No blood**  
**No abdominal pain or urgency**  
**PUCAI 0**

# IUS Response on Day 4

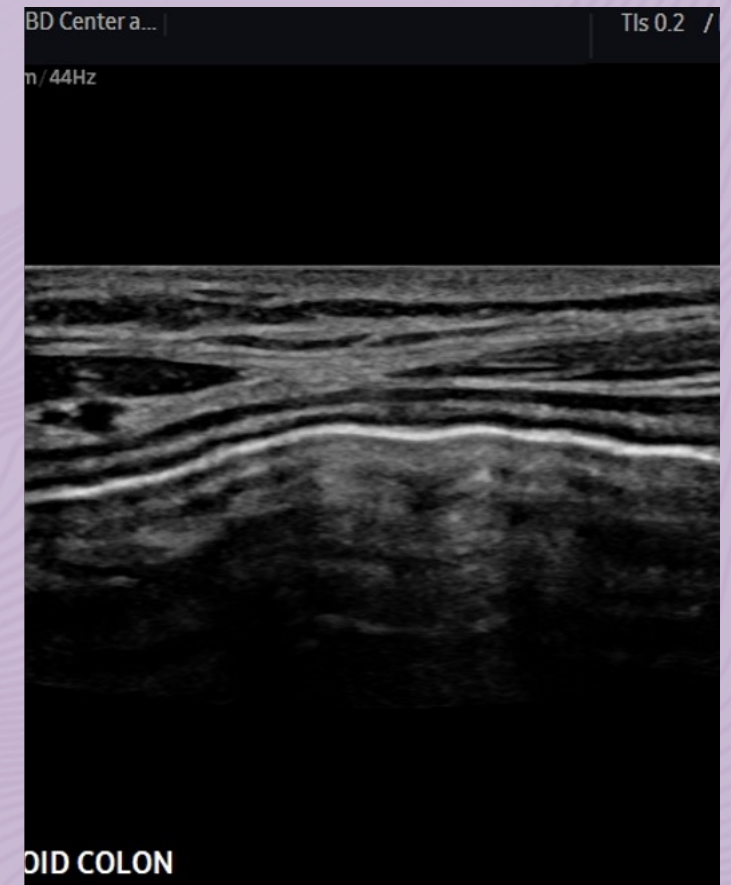
Day 0



Day 2



Day 4



# IUS Response on Day 4





# IUS Response on Day 4



SIGMOID COLON

# IUS Response on Day 4







# Resolution

**Discharged home on day 5/12 on Upadacitinib 30 mg  
2 week telehealth follow up in stable clinical remission  
weaning prednisone**