

Background

Idiopathic myointimal hyperplasia of the mesenteric veins (IMHMOV) is a rare venopathy that presents with chronic abdominal pain, diarrhoea and rectal bleeding.

Difficulties in diagnosis:

- Non-specific symptoms
- Non-specific endoscopic and radiologic features
- Submucosal tissue required for histological diagnosis
- Definitive diagnosis historically at resection

Patients are **frequently misdiagnosed** and receive ineffective medical therapy, leading to significant morbidity before definitive surgical resection is undertaken.

Transanal minimally invasive surgery (TAMIS) offers a safe route to obtain full-thickness rectal tissue; however, its use for pre-operative diagnosis of IMHMOV has not been reported until now.

Case Presentation

Initial presentation: A 65-year-old male with 3 weeks of generalized abdominal pain and diarrhoea after overseas travel.



CT findings:

- Diffusely thickened rectosigmoid and descending colon
- Significant associated mesenteric stranding

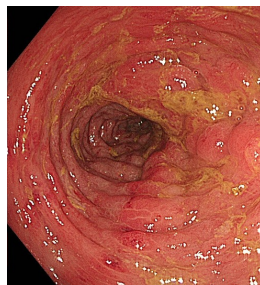
Initial investigations:

- Faecal calprotectin <5µg/g
- Comprehensive stool testing negative for viral, bacterial and parasitic causes
- Flexible sigmoidoscopy – oedema and telangiectasia, **biopsy inconclusive**

Medical therapy: Treated empirically with antibiotics and steroids; symptoms worsened – 13 non-bloody bowel actions and 20kg weight loss

Repeat endoscopy:

- Pale, oedematous, friable mucosa with telangiectasias
- **Biopsies still inconclusive**



TAMIS

Platform: GelPOINT® Path (Applied Medical).

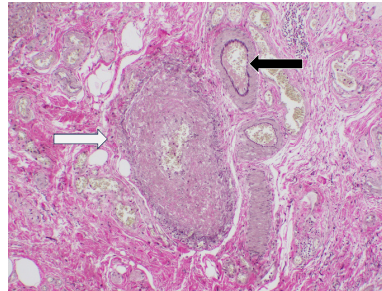
Location: Posterolateral upper rectum, 12 cm from the anal verge.

Specimen: 30 × 10 mm wedge-shaped full-thickness biopsy of moderately inflamed mucosa.

Closure: Defect left open.

Pathology

Histology revealed **thickened walls of the sub-mucosal veins** consistent with myointimal hyperplasia – the pathognomonic change for IMHMOV.



White arrow – affected vein:

- Thickened wall
- Lack of internal elastic lamina (differentiates from arteries)

Black arrow – unaffected artery

Results

Definitive diagnosis of IMHMOV established **pre-operatively**.

The patient underwent elective surgical resection of the involved segment without peri-operative complications.

Early diagnosis avoided unnecessary prolonged medical therapy and reduced operative morbidity.

Discussion

Safety: TAMIS was performed in the extraperitoneal posterolateral upper rectum without need for intra-operative closure, demonstrating a low-risk profile.

Diagnostic Yield: Full-thickness tissue allowed direct assessment of the sub-mucosal veins, enabling a definitive diagnosis that would otherwise require resection specimens.

Therapeutic Impact: Early, accurate diagnosis facilitated timely surgical planning, avoided ineffective medical therapy, and potentially reduced overall morbidity.

Integration into Clinical Pathways: This case adds TAMIS to the diagnostic armamentarium for IMHMOV, especially useful when conventional biopsies are inconclusive.

Conclusion

Transanal minimally invasive surgery is a safe, effective, and minimally invasive method to obtain full-thickness rectal biopsies for the pre-operative diagnosis of IMHMOV.

Its application can prevent diagnostic delays, reduce unnecessary medical treatment, and optimise surgical outcomes.

References

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