Overview

- Anatomy & Classification
- Technique
- Examples

Anal Canal: Anatomy

- Dentate Line
- Sphincter Mechanism
- External sphincter
- Internal sphincter
- Intersphincteric space
- Puborectalis (sling)
- Levator Ani muscle

Lateral Compartments
Fistula Protocol
• Modified pelvis protocol
• Monitored Study
• Phased array pelvic coil
• Thin slices (3 mm)
• High matrix

Fistula Protocol
• Tri plane Scout
• Standard FOV
• Triplane T2 FSE
• Axial and Coronal T1 with FS
• Axial Coronal STIR small FOV
• Axial and Coronal Post Gadolinium FS T1

Why Use STIR

What and How to Report
• Describe and classify the type of fistula
• Distance of the mucosal defect to the perianal skin on coronal images
• Secondary fistulas, abscesses, bowel wall abnormalities, reactive nodes

Fistulas
Describe and Classify

Intersphincteric Fistula
STIR

Transsphincteric Fistula

Extrasphincteric Fistula

Abscesses associated with Fistulas

Bowel Changes In Crohn's
Treatment

• 1) Fistulotomy: The fistula is incised from external to internal opening. The floor of the tract is scooped & wound heals by granulation.
2) Fistulectomy: Tract is excised from external to internal opening.
3) Sphincter saving fistulectomy: Tract is cored from the external to the internal opening protecting the damage to the sphincter.
4) Seton fistulotomy

Seton Fistulotomy

• Rubber ligature or vessel loop is pulled through the fistula
• Then is tightened every 2 weeks or so in order to obtain pressure necrosis
• Advantage
  – Muscle is slowly cut and fibroses at the same time in order to cause as little damage as possible to the sphincter complex.

Conclusion

• Ano Rectal fistulas
  – Can be accurately imaged with MRI
  – Increased indication for MRI of pelvis in patients with Crohn's disease
  – Knowledge of ano rectal anatomy is crucial

References

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