## How to Differentiate Medically Treated Vs. Surgically Treated Crohn's Disease on MR Enterography

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**Purpose**: the goal of this educational exhibit is to demonstrate how MR Enterography (MRE) can be used to identify the findings of Crohn's disease which lead to the ability to differentiate between patients requiring medical treatment and surgical treatment. Also, this exhibit will highlight the importance of a multi-parametric MRE protocol.

## **Outline of Content:**

- A review of the clinical treatment algorithm for patients with Crohn's disease
  - medical therapies including steroids and newer biologic agents to reduce inflammation
  - the role for potential surgical interventions
- A discussion of the potential role for MRE in the diagnostic evaluation of Crohn's disease
  - advantages of MRE over CTE or fluoroscopic studies
- Presentation of an optimized MRE protocol including proper patient preparation and positioning as well as a detailed presentation of all relevant MR sequences including cine functional imaging and dynamic contrast enhancement images
- A detailed case by case review of imaging findings in MRE and associated clinical significance
  - example: acute inflammatory disease with and without complications
  - example: fibrotic strictures including appearance on functional imaging

## Summary:

MR Enterography can accurately identify the findings of Crohn's disease but more importantly can differentiate between patients requiring medical treatment and surgical treatment. A multi-parametric MRE protocol is essential to achieving a highly clinically focused examination.