

**Time:** 1:54:00 PM - 2:00:00 PM

**Presenter:** Gory Ballester, MD

**Title of Abstract:** **Gastrointestinal Carcinoid Tumor: The Role of CT and MR**

**Abstract:**

**Institution:** University of Texas MD Anderson Cancer Center

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**Modality:** Multi

**Organ System:** GI

**Scientific and/or Clinical Significance?** CT and MR play an important role in the diagnosis and management of gastrointestinal carcinoid tumors. Novel imaging techniques are increasingly playing a role in the managements of these patients.

**Relationship to existing work** This is a review of the role of CT and MR for evaluation of GI carcinoid tumors

**Purpose** Rare to encounter and difficult to diagnose, gastrointestinal carcinoid tumor is a challenging disease. As a neuroendocrine tumor, it is able to secrete serotonin, which is a useful biological marker. However, not all patients with gastrointestinal carcinoid tumors demonstrate abnormalities in the serum serotonin levels. One important characteristic of gastrointestinal carcinoid is their ability to form a desmoplastic reaction. This desmoplastic reaction can precede metastatic involvement and serve as an early sign of carcinoid. CT and MR play an important role in the diagnosis and management of gastrointestinal carcinoid tumors. Novel imaging techniques are increasingly playing a role in the managements of these patients. This exhibit will present the MR and CT imaging presentation of gastrointestinal carcinoid tumors with special attention to the detection of desmosplastic reaction and the detection of primary and metastatic disease. The exhibit will present imaging protocols and the role of newer imaging techniques in the diagnosis, staging, and management of patients with gastrointestinal carcinoid tumors. **Content Organization** - Review the epidemiology, risk factors, and clinical presentation of gastrointestinal carcinoid tumors. - Present the various imaging protocols utilizing MDCT and MRI for the evaluation gastrointestinal carcinoid tumors. - Present the CT and MR imaging characteristics of the desmoplastic/fibrous reaction of gastrointestinal carcinoid tumor and its role in early diagnosis. - Present role of CT and MR in the staging and management of gastrointestinal carcinoid tumors. **Major Teaching Points** - Carcinoid tumor is a neuroendocrine tumor associated with secretion of serotonin, and elevated serotonin serum levels. - Desmoplastic reaction can precede metastatic involvement and serve as an early sign of carcinoid. - Optimum imaging techniques with CT and MR are important in the management of patients with gastrointestinal carcinoid tumor.