**Presenter:** Sandeep Hedgire

**Title of Abstract:** ‘Significant others’: Imaging of non-neoplastic, non-visceral infiltrative disorders of abdomen and pelvis

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**Modality:** Multi

**Organ System:** Multi

**Scientific and/or Clinical Significance?**

Large gamut of non-neoplastic, non-visceral infiltrating disease that affect the abdomen and pelvis including the peritoneum and retroperitoneum exists. Knowledge of the imaging appearance is required to distinguish these entities and arrive at an accurate diagnostic conclusion.

**Purpose:**

**Purpose:** To review salient imaging features of non-neoplastic, non-visceral infiltrative disorders of abdomen and pelvis. **Content Organization:** 1. CT, MRI and PET-CT findings in Retroperitoneal fibrosis, sarcoidosis, amyloidosis, sclerosing mesenteritis, omental infarcts, systemic lupus erythematosus, fibromatosis, Ig G4 disease, Castleman disease, Erdheim Chester disease. 2. Differential diagnoses of these entities. 3. Pitfalls. **Major Teaching points:** There is a large gamut of non-neoplastic, non-visceral infiltrating disease that affect the abdomen and pelvis including the peritoneum and retroperitoneum. Retroperitoneal fibrosis show soft tissue density on CT but on MRI, the appearance on T2WI imaging is governed by stage of the disease. Peritoneal sarcoid may manifest as ascites, peritoneal thickening and nodularity mimicking peritoneal carcinomatosis. Amyloidosis involves the urinary system in addition to the retroperitoneum, mesentery, omentum, and gastrointestinal tract. Non neoplastic and non infectious disease of abdomen tend to show variable imaging patterns but may have predisposition for location e.g. perirenal spaces in Erdheim Chester disease. IgG4-related systemic disease is a recently recognized immunoglobulin deposition disease characterized by infiltration of IgG4-positive plasma cells in multiple organs. Pancreas is the most commonly involved organ in this disease. A thorough evaluation of the imaging appearance is required to distinguish these entities and arrive at an accurate diagnostic conclusion.