

Abstract #51

IgG4-Related Disease: Current Status and Future Directions

Darya Kurowecki, McMaster University; Michael Patlas, McMaster University; Ehsan Haider, St. Joseph's Healthcare Hamilton, McMaster University; Abdullah Alabousi, McMaster University

LEARNING OBJECTIVES:

1. To discuss the common and uncommon multi-organ manifestations of immunoglobulin G4-related disease (IgG4-RD).
2. To understand the indications, challenges, and pitfalls of various cross-sectional imaging modalities, including MDCT, MRI, and US, in the diagnosis and evaluation of IgG4-RD.
3. To review the spectrum of imaging findings, mimics, and differential diagnosis of IgG4-RD from head-to-toe.

BACKGROUND: IgG4-RD is an autoimmune disorder characterized by infiltration of organs with IgG4-positive plasma cells resulting in fibro-inflammatory lesions in one or more organ systems. Although the pancreas is the most commonly affected organ, involvement of extra-pancreatic organs is increasingly recognized as a key manifestation of the disease. Patients are often asymptomatic and serum IgG4 concentrations may be normal. Treatment consists of the utilization of corticosteroids. Although a definitive diagnosis requires histopathology, imaging plays an essential role in guiding appropriate management.

CONCLUSION: Knowledge of the varied imaging findings of this multi-system disease is essential for radiologists to avoid misdiagnosis and assist with timely and effective treatment.

2019 CAR ASM Educational Exhibit – 2nd Place Winner

Abstract #14

Globe Imaging: A Global Overview of Globe Pathologies

Joseph Yang, Queen's University; Benjamin Kwan, Queen's University; Omar Islam, Queen's University; Donatella Tampieri, Queen's University; Ian Silver, Queen's University; Jonathan Butler, Queen's University; Martin ten Hove, Queen's University; Nancy Yufeng Chen, University of Ottawa

OBJECTIVES: Correlate clinical findings with radiological manifestations to establish diagnosis of globe pathologies Illustrate characteristic imaging findings of commonly encountered globe abnormalities on CT and MRI Learn to create a differential diagnosis of globe abnormalities based on anatomic location

BACKGROUND: Globe abnormalities can present as a conundrum on CT and MRI images and often are under recognized. Abnormalities can be divided based on anatomical location and can involve neoplastic, infection, traumatic, iatrogenic and inflammatory locations. Common surgical hardware involving the globe will also be presented. Globe abnormalities can present on CT and MRI and may be incidental findings. Correlation of imaging findings with clinical eye exam helps guide diagnosis. Precise understanding of orbital anatomy and characteristic imaging features leads to timely diagnosis and appropriate management plan.

CONCLUSION: Understanding characteristic features of globe abnormalities and relation to corresponding ophthalmological clinical exam will aid radiologists in establishing diagnosis with improved accuracy and efficiency, while providing concise consultations to appropriate physicians.