

Hidden in Plain Sight: Castleman's Disease Presenting as Fever of Unknown Origin

Pinguang Yang MD PhD, Joseph DiTursi MD, Prishanya Pillai MD, Hani Katerji MD, Gauri Patil BS, Paul Woods DO, Bilal Ahmed MD
 Department of Medicine, University of Rochester Medical Center, Rochester, NY

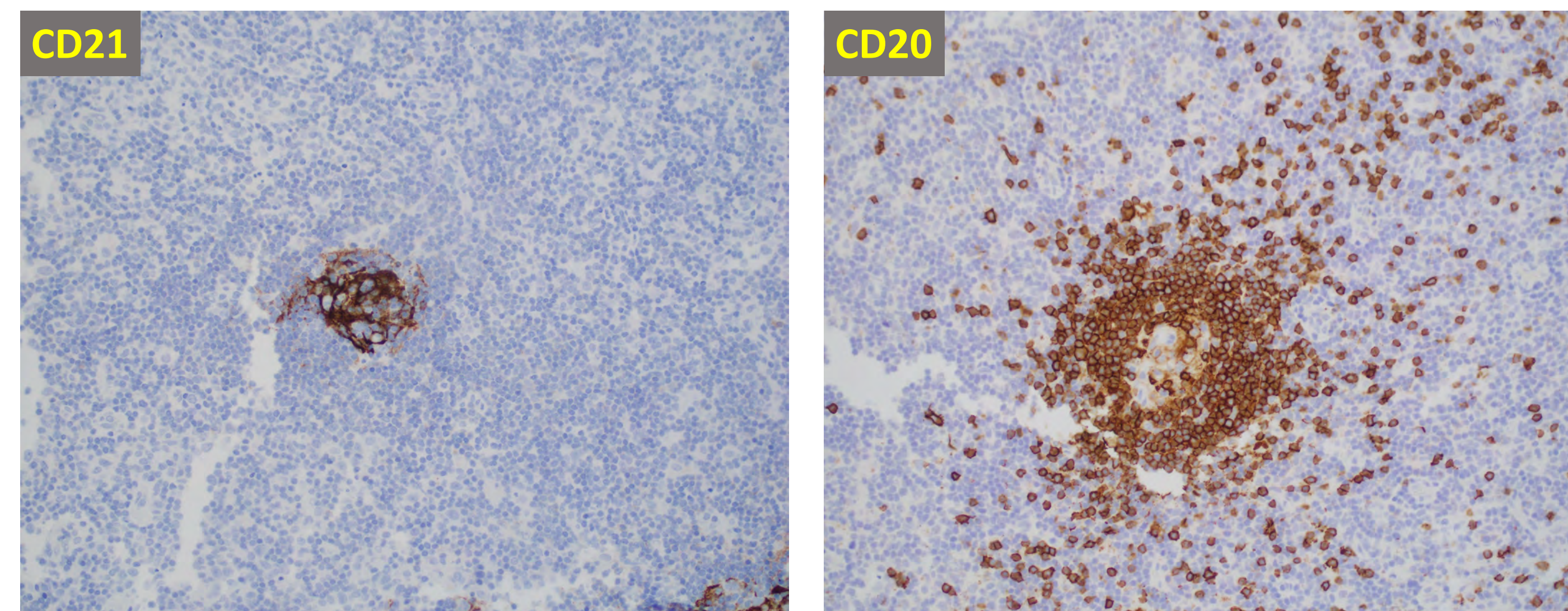
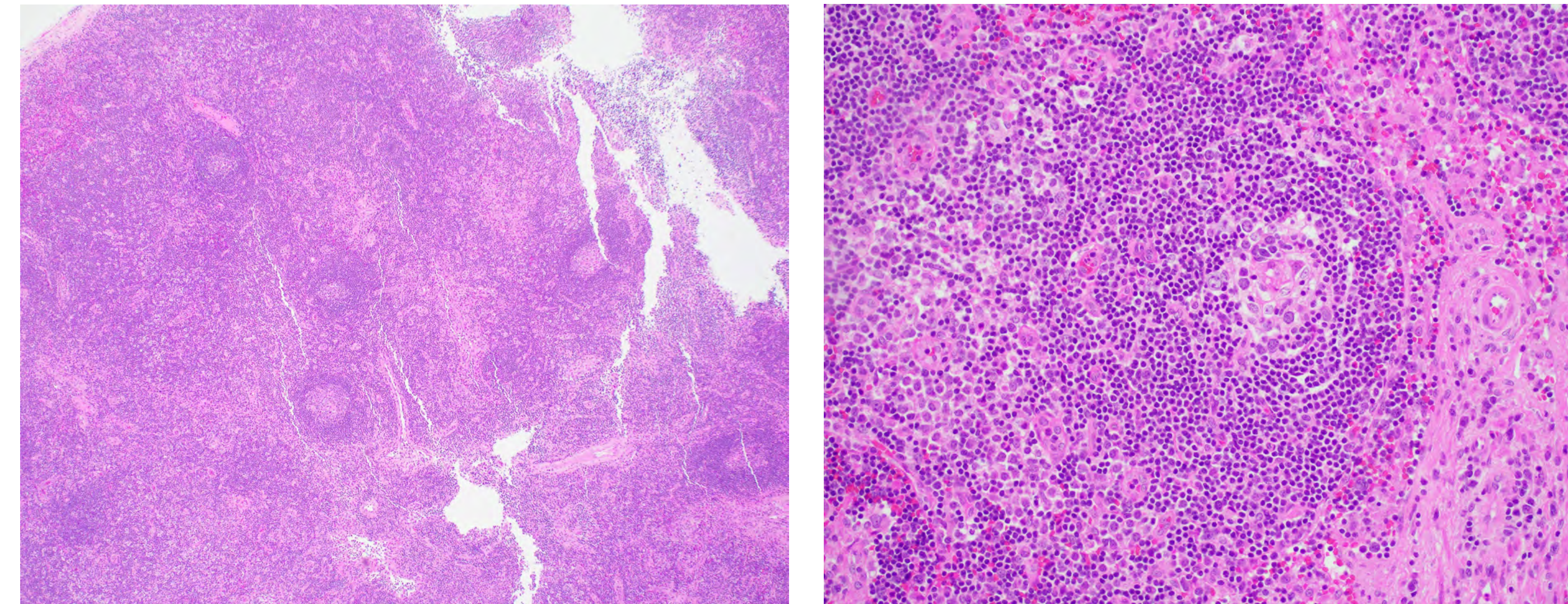
Learning Objectives

- Appreciate the workup of fever of unknown origin in the setting of peripheral lymphadenopathy
- Recognize diverse presentations of unicentric Castleman's disease

Case Presentation

- A 50-year-old female with history of Crohn's disease presented with a two-day history of fevers, left ear and throat pain, nuchal rigidity and frontal headache. She was tachycardic with leukocytosis and lactic acidosis.
- CT neck ruled out peritonsillar abscess for reported dysphagia and revealed a prominent left cervical lymph node.
- She was started on empiric meningitis coverage, and later transitioned to broad spectrum antibiotics after negative lumbar puncture, however fevers persisted.
- Extensive infectious, rheumatologic and endocrine workups for fever of unknown origin (FUO) were unremarkable. On day five, she developed right-sided neck pain. Ultrasound showed bilateral cervical lymphadenopathy.
- Left anterior cervical excisional lymph node biopsy was performed, confirming unicentric HHV8-negative Castleman's disease (CD), hyaline vascular type.
- CT chest did not show evidence of mediastinal or axillary lymphadenopathy. She was started on prednisone for intermediate severity disease, with resolution of fevers.

Lymph Node Architecture



Sections of the lymph node show scattered follicles with regressed and involuted germinal centers composed mostly of follicular dendritic cells as highlighted by CD21 immunohistochemical stain and containing few lymphocytes with sclerotic blood vessels. The interfollicular spaces exhibit prominent vascular proliferation with hyalinized walls. Immunohistochemical staining shows expanded mantle zones as highlighted by CD20.

Discussion

- Here we report a challenging case of unicentric Castleman's disease which presented with acute onset of suspected meningitis and met criteria for systemic inflammatory response syndrome (SIRS).
- Extensive FUO workup revealed a diagnosis of CD, which is a rare group of lymphoproliferative disorders and is classified as unicentric and multicentric.
- Multicentric CD affects multiple lymph node regions and is associated with systemic inflammatory symptoms, including weight loss, night sweats and generalized lymphadenopathy.
- In contrast, UCD affects only a single lymph node region, and its inflammatory presentation is usually mild. Patients with UCD are usually asymptomatic except for localized lymphadenopathy.
- Our patient's acute presentation of UCD with septic manifestations and without prior systemic "B" symptoms builds on previous case reports of this rare disease and expands it further.
- Our case highlights the importance of considering a lymphoproliferative disorder in the differential diagnosis for FUO, even in the setting of a single enlarged lymph node.

References

- Fajgenbaum DC, et al. International, evidence-based consensus diagnostic criteria for HHV-8-negative/idiopathic multicentric Castleman disease. *Blood*. 2017 Mar 23;129(12):1646-1657. doi: 10.1182/blood-2016-10-746933. Epub 2017 Jan 13. PMID: 28087540; PMCID: PMC5364342.