

INTRODUCTION

- Amyloidosis refers to extracellular tissue deposition of protein fibrils which can affect a variety of organ systems
- AL (primary) amyloidosis is caused by deposition of immunoglobulin light chain fragments
- Often occurs in the setting of an underlying plasma cell dyscrasia
- We present a case of AL amyloidosis manifesting as diffuse lymphadenopathy diagnosed via the use of endoscopic ultrasound (EUS)-guided fine needle biopsy (FNB)

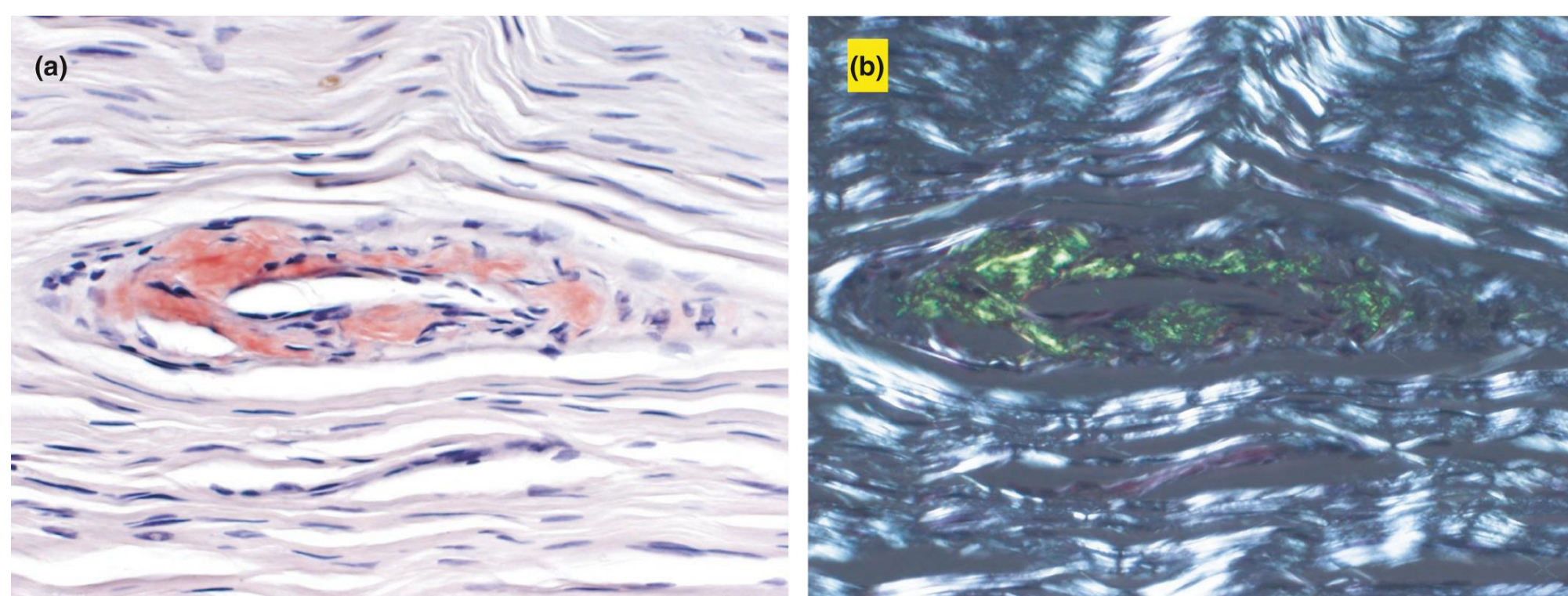


Figure 1. Example from literature of a blood vessel demonstrating Congoophilic amyloid deposit with apple-green birefringence under polarized light¹

CASE DESCRIPTION/METHODS

- 66-year-old African American female presenting with fatigue and cervical lymphadenopathy
- CT scan of neck, chest, abdomen and pelvis: mediastinal and peripancreatic lymphadenopathy (largest diameter 20-mm)
- Comprehensive laboratory working including flow cytometry and tumor markers: negative
- EUS showed hypoechoic peri-pancreatic/aortocaval lymph nodes
- FNB performed with 22 Ga needle via transgastric approach
- Cytopathologic evaluation
 - Abundant lymphocytes
 - Hyalinized eosinophilic fragments with strong Congoophilia and apple-green birefringence in polarized light
 - Liquid chromatography tandem mass spectrometry performed on microdissected peptides revealed peptide profile consistent with AL (kappa)-type amyloid deposition
- Workup for underlying plasma cell dyscrasia and other sites of end organ involvement underway

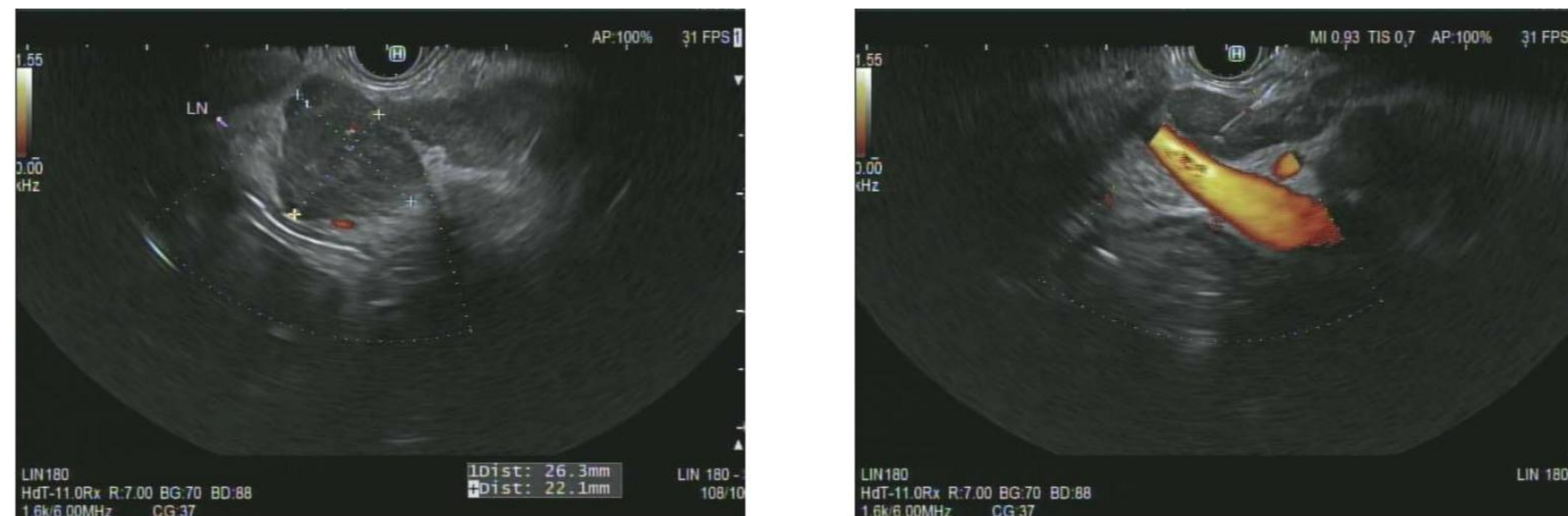


Figure 2. EUS images demonstrating intraabdominal lymphadenopathy (left) and EUS-guided FNB of lymph node with use of color doppler (right) in our patient

DISCUSSION

- Amyloidosis is a systemic disease which can affect many organs
- Intraabdominal lymphadenopathy is a rare manifestation of amyloidosis²
- Prognosis of AL amyloidosis presenting as lymphadenopathy is good (in the absence of hematologic malignancy or rapid change in lymph node size)³
- Cornerstone of treatment is early diagnosis before irreversible end-organ damage⁴
- EUS-FNB is an important diagnostic modality that allows for tissue diagnosis of Amyloidosis and ruling out other etiologies of lymphadenopathy like malignancy
- Our patient presented with diffuse lymphadenopathy and EUS-FNB allowed for tissue sampling and a diagnosis of AL Amyloidosis

References

1. J Intern Med. 2021 Mar;289(3):268-292.
2. Amyloid. 2014 Dec;21(4):256-60.
3. Amyloid. 2008 Jun;15(2):117-24.
4. Blood Cancer J. 2021 May 18;11(5):97.