



# NC Society of Pathologists Digest

## Society News

September 2025

### NEW Education Advisory Committee

### Longitudinal Learning Series

### CAP HOD Recap

### Save The Date

### Interesting Cases

#### Your Officers:

- Diana Cardona, MD, MBA  
President
- Chad McCall, MD, PhD  
President-Elect
- Matthew Snyder, MD  
Vice President
- Amanda Hemmerich, MD  
Secretary Treasurer
- Christopher McKinney, MD  
Immediate Past President

#### Trainee Advisory Council:

- Joe Maniaci, MD  
Chair
- Joshua Cox-Jones, DO  
Co-Chair

## Education Advisory Committee

Given the success of our Trainee Advisory Council (TAC), the NCSP has launched a **new Educational Advisory Council (EAC)**, with the hopes of creating innovative educational offerings for our members, trainees and future pathologists! The current members of the EAC are:

- Duke – John Carney, MD
- UNC- Lee-Ching Zhu, MD
- ECU- John Markantonis, DO
- Wake Forest- Giovanni Insuasti, MD

To kick off their work, this team plans to survey the membership with the goal of learning how best to meet your needs and interests. Please be on the lookout for this survey! Additionally, are you interested in shaping our future? Become part of this new council!! Contact us at [ncpath@ncmedsoc.org](mailto:ncpath@ncmedsoc.org).

## Longitudinal Lecture Series

The NCSP Longitudinal Learning Series continues to evolve as a cornerstone of our educational mission, offering high-impact sessions that address the real-world challenges and opportunities facing pathology trainees across



North Carolina. We are thrilled to announce that our next session will feature **Dr. Matthew Foster**, President and CEO Valley Regional Hospital & Mt. Ascutney Hospital and Health Center, whose expertise and insight promise to deliver another memorable learning experience. The session is scheduled for **October 17th, 2025 (8-9 AM)**.

## CAP House of Delegates Recap

The College of American Pathologists 2025 Annual Meeting was a great success. Our state delegation was well represented by **Drs. Matt Snyder, Anand Lagoo, Jessica Poisson, and Stephen Olsen**. Our own Dr.



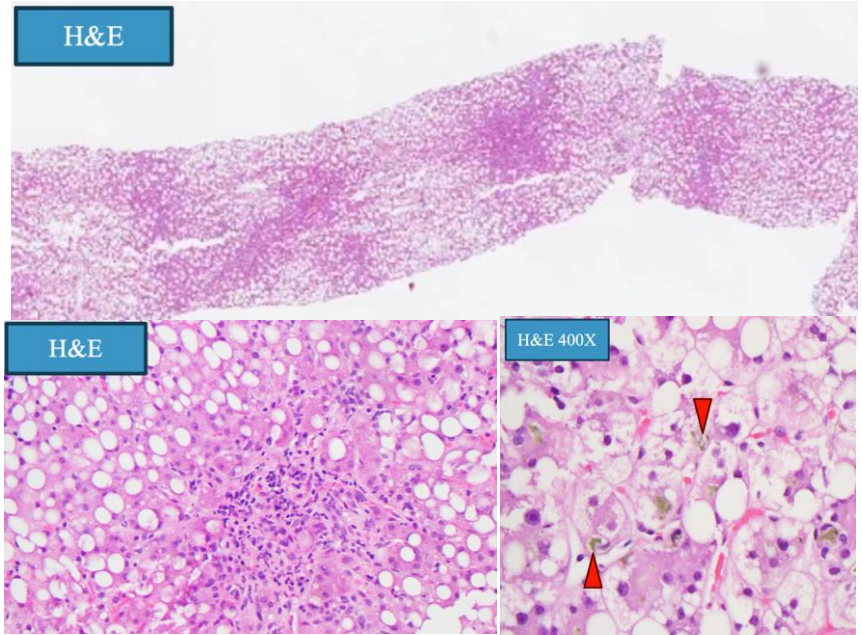
**Diana Cardona** was an invited panelist for a Workforce and Immigration session. The day culminated with short, innovative presentations on how pathologists are currently leveraging AI into their everyday practice, which ranged from tumor board preparation, report writing and education. If you missed the meeting, we encourage you to watch the [recording](#).

**NORTH CAROLINA SOCIETY OF PATHOLOGISTS  
2026 ANNUAL MEETING & SHELLEY LECTURE  
APRIL 17-18, 2026 | BALLANTYNE HOTEL, CHARLOTTE, NC**

# NCSP Interesting Case Series

*By: Joseph Maniaci, MD; Alina Iuga, MD*

**Clinical History:** 11y/o F diagnosed with high-risk B cell acute lymphoblastic leukemia undergoing induction chemotherapy, admitted with severe HSV-related mucositis and elevated LFTs - Day 0 of induction enzymes were within normal limits, day 28 after induction labs: albumin 2.2 (reference range 3.4 - 5.0 g/dL), total bilirubin 7.3 (0.3 - 1.2 mg/dL), direct bilirubin 5.9 (0.00 - 0.30 mg/dL), AST 206 (13 - 26 U/L), ALT 419 (12 - 26 U/L), Alk Phos 165 (70 - 370 U/L) and GGT 843 (0 - 38 U/L). Medications include-prednisone, vincristine, micafungin, acyclovir, daunorubicin, asparaginase and trimethoprim-sulfamethoxazole. Negative autoimmune, viral, alpha-1-antitrypsin, & Wilson disease tests.



Liver parenchyma with marked steatosis Portal tracts with a mild lymphocytic infiltrate. Swollen hepatocytes with micro & macro vesicular steatosis and marked canalicular cholestasis.

**Case Diagnosis: Acute cholestatic hepatitis with micro- & macrovesicular steatosis, compatible with drug induced liver injury Drug Induced Liver Injury (DILI)** [Liver tests improved 1 month after asparaginase was stopped]

Histology/Key Diagnostic Criteria

- Rapid development of marked steatosis (microvesicular at first) and elevated aminotransferases
- Canalicular cholestasis (associated with asparaginase toxicity)
- Lack ballooning degeneration of hepatocytes, Mallory’s hyaline, & sinusoidal fibrosis

High-Yield Relevant Information

- Asparaginase is an antineoplastic drug used in the treatment of acute lymphoblastic leukemia
- Asparaginase injures hepatocytes through inhibition of protein synthesis (low albumin and clotting factors) and impairment of lipoproteins/lipids excretion (leading to steatosis)
- Asparaginase treatment can lead to coagulopathy
- Asparaginase induced liver injury generally resolves within two to eight weeks

Differential Diagnoses by Patterns

Macrovesicular steatosis	Microvesicular steatosis	Cholestatic injury
Metabolic associated steatotic liver disease/steatohepatitis (MASLD/MASH); Drug/toxin effect; Inborn errors of metabolism; viral hepatitis; alpha-1 antitrypsin deficiency	Mitochondrial injury; genetic mitochondrial disorders; mitochondrial DNA maintenance deficiencies (MDMDs))	Drug effect; superimposed on metabolic syndrome-associated liver injury; progressive familial intrahepatic cholestasis

References:

1. Livertox: Bethesda (MD): National Institute Of Diabetes And Digestive And Kidney Diseases; 2012-. Asparaginase.
2. Qin FL, Sang GY, Zou XQ, Cheng DH. Can J Gastroenterol Hepatol. 2022;2022:5914593. Published 2022 Mar 24. D
3. Meunier L, Larrey D. Ann Hepatol. 2020;19(6):597-601. doi:10.1016/j.aohp.2019.11.012