



SESSION 1

Hepatobiliary Manifestations of IBD

INTERACTIVE CASE PRESENTATION

Tara is a 36-year-old female with newly diagnosed Crohn's disease (CD). Colonoscopy three weeks ago showed scattered aphthous ulceration in the right colon, and a distorted ileocecal valve with normal ileum. Her medical history includes a previous vaginal hysterectomy for fibroids, a diagnosis of Gilbert's syndrome in her teens, and moderate obesity. Her weight is 102 kg and her examination is otherwise normal. There is no visible icterus.

Bloodwork drawn on the day of her colonoscopy shows:

- WBC: $6.4 \times 10^9/L$
- Hemoglobin: 109 g/L
- MCV: 84.2 fL
- Platelets: $422 \times 10^9/L$
- CRP: 12.4 mg/L
- ALT: 85 U/L
- Alkaline phosphatase: 120 U/L
- GGT: 87 U/L
- Total bilirubin: 12 $\mu\text{mol/L}$

Decision Node 1

- Which investigation(s) would you request?
 - a. Bloodwork for causes of chronic hepatitis
 - b. Bloodwork plus an abdominal ultrasound
 - c. Bloodwork plus an abdominal MRCP
 - d. Bloodwork plus an abdominal ultrasound plus transient elastography
 - e. Bloodwork plus an abdominal ultrasound plus a liver biopsy

Her additional bloodwork reveals anti-smooth muscle antibodies and a positive ANA (titre 1/80). However, quantitative immunoglobulins are normal and there are no anti-mitochondrial antibodies. Repeat ALT has fallen to 45 U/L. Repeat GGT has fallen to 60 U/L. Ultrasound suggests moderate hepatic steatosis but is otherwise normal.

Tara is started on ileal-release budesonide 9 mg PO OD and methotrexate 25 mg SC weekly. Her bloodwork is repeated monthly. Her liver enzymes rise gradually. After six months, alkaline phosphatase has risen to 157 U/L and ALT to 65 U/L. On questioning, she acknowledges drinking two or three glasses of wine each evening.



Decision Node 2

- What would you advise?
 - a. Avoid alcohol, continue methotrexate with monthly bloodwork
 - b. Avoid alcohol, reduce methotrexate to 15 mg weekly with monthly bloodwork
 - c. Avoid alcohol and stop methotrexate
 - d. Arrange transient elastography
 - e. Arrange liver biopsy

Tara agrees to stop drinking and you discontinue her methotrexate. Over the next three months her alkaline phosphatase rises to 228 U/L with ALT 102 U/L. You arrange an MRCP, which notes minor intrahepatic duct dilation in a single liver segment.

Decision Node 3

- Would you arrange a liver biopsy?
 - a. Yes
 - b. No

A liver biopsy, arranged under ultrasound guidance, shows a lymphoplasmacytic periportal infiltrate with interface hepatitis and a few poorly formed granulomas. Unfortunately, her bowel habit has worsened since stopping methotrexate, with five loose stools per day and intermittent crampy abdominal pain. Her fecal calprotectin is 1230 mcg/g.

Decision Node 4

- What treatment would you recommend?
 - a. Prednisone
 - b. Ursodeoxycholic acid
 - c. Prednisone plus ursodeoxycholic acid
 - d. Biologic therapy plus prednisone
 - e. Biologic therapy plus ursodeoxycholic acid
 - f. Biologic therapy plus prednisone plus ursodeoxycholic acid
- Which biologic would you prefer for this patient?
 - a. Anti-TNF (infliximab or adalimumab)
 - b. Vedolizumab
 - c. Ustekinumab

You decide to treat Tara with ustekinumab and prednisone. Pre-biologic workup reveals no detectable hepatitis B surface antigen but also no detectable hepatitis B surface antibody. She is sure she was vaccinated as a teenager.

Decision Node 5

- What would you do?
 - a. Nothing
 - b. Recommend Twinrix™ vaccine
 - c. Recommend Recombivax™ vaccine
 - d. Request additional serology and then decide

