SESSION 4
CROHN'S DISEASE

CASE-BASED BREAKOUT WORKSHOP

Oliver is a 17-year-old male that you are seeing in a pediatric gastroenterology clinic. He underwent colonoscopy just two weeks ago after presenting with a two-month history of crampy right lower quadrant pain and a 5kg weight loss. Endoscopy showed ileocolonic disease with deep ulcers in the last 25 cm of ileum and in the sigmoid colon. Smaller ulcers were noted elsewhere in colon. There has been no perianal fistulizing disease. Of note, he had been taking NSAIDs weekly for headaches over the last 3 months. His mother mentioned Oliver was quite stressed with his grade 12 school workload.

Discussion Point 1

- Would you recommend up front "advanced therapy" (a biologic or targeted small molecule)?
- Is a course of steroids (or exclusive enteral nutrition) followed by an immunomodulator also appropriate?

Discussion Point 2

- If you suggest an advanced therapy, which would you recommend and why?
- What factors related to the drug do you consider?
- What aspects of the patient phenotype do you consider?
- Which therapies are most effective for achieving clinical remission and mucosal healing in Crohn's disease?

Through a process of shared decision-making, infliximab is chosen and initiated.

Discussion Point 3

- How do you maximize the efficacy and durability of first-line advanced therapy?
- When do you use concomitant immunomodulators with infliximab and other biologics?
- Do you use proactive therapeutic drug monitoring during induction and/or maintenance?

Oliver agrees to combine his infliximab with weekly IM methotrexate. His mother is a nurse and agrees to administer the injections. He now attends the adult gastroenterology clinic. Infliximab trough levels are measured at week 14, targeting a level greater than 10 mcg/mL. His infusion interval is shortened to 6 weeks as his trough level was 4.8 mcg/mL.

His continues to do very well clinically and starts university, living in residence. His fecal calprotectin normalized to 158 mcg/g after six months. His colonoscopy is repeated after 9 months and shows only small residual ulcers in the ileum. The colon looks normal.

Discussion Point 4

- When would you consider switching therapy? Is absence of ulcers required as an outcome?

You recommend continuing both infliximab and methotrexate. But as you continue to follow Oliver you note a change at the one-year mark. CRP (previously always normal) is up to 25 mg/L with hemoglobin 105 and albumin 33 g/L. You contact Oliver and learn that he is having abdominal pain and loose stools again for the first time since initial treatment. These symptoms improved temporarily after his last infusion. The 54-week trough level is returned as undetectable with an anti-infliximab antibody titre of 40. He admits to having stopped taking methotrexate several months earlier, because he was tired of taking two drugs. Further, he discloses he is enjoying university life and was concerned about the effects of methotrexate on his alcohol intake and read 'somewhere' that methotrexate may affect his sex life.

Discussion Point 5

- In the setting of secondary loss of response to infliximab related to anti-drug antibody development, what would you recommend?
  - Would you increase the dose to overcome the antibodies? Would you switch to subcutaneous infliximab or another anti-TNF agent? Would you switch out of class? Consider the pros and cons of each option.