SESSION 2
Biologic Therapy in IBD: Today and Tomorrow
CASE-BASED BREAKOUT WORKSHOP

Carmela is a 72-year-old widow diagnosed five years ago with colonic and perianal fistulizing Crohn's disease (CD), with a small abscess. Other medical history includes breast cancer at age 52, treated with surgery and radiation. For her CD, she was treated at the outset with antibiotics and surgical drainage, then infliximab as monotherapy. A small squamous cell carcinoma was excised from her cheek shortly after CD diagnosis. Around the same time, her twin sister was diagnosed with lymphoma. After one year of treatment, she was asymptomatic with no perianal pain or discharge. Her CRP and fecal calprotectin were normal. At that point treatment was withdrawn.

Repeat colonoscopy one year ago showed scarring throughout the colon with scattered inflammatory polyps but no overt disease activity. Segmental biopsies revealed chronic inflammation with deep plasma cells and neutrophils.

Decision Node 1

- Was the decision to stop therapy correct?
- Are these biopsy findings meaningful?
- Would you have resumed therapy based on these findings?

Carmela did not resume therapy after colonoscopy. She now presents to your office with increasing symptoms over last six months. She is passing five stools per day (up from two) with moderate urgency. She has also noted scant discharge from fistula tract on alternate days. Examination shows the fistula to be open, but without any signs of local sepsis. Her CRP is 6.3 mg/L. Blood work is otherwise normal.

Decision Node 2

- Would you now resume therapy?
- Is further investigation required?

Her fecal calprotectin level is 876 mcg/g. Colonoscopy shows linear rectosigmoid ulceration. An MRI of the pelvis shows a single trans-sphincteric fistula with no abscess.

Decision Node 3

- What treatment would you start?
- What factors would influence your choice of therapy?

After extensive discussion, Carmela chooses to start ustekinumab as monotherapy. She receives an intravenous induction dose of 390 mg and then three subcutaneous maintenance doses of 90 mg before you see her in follow-up. She reports a slight reduction in stool frequency but no change in perianal discharge. She tells you that her dermatologist recently treated a number of actinic keratoses on her back with liquid nitrogen.

Just before her last dose, her CRP was 5.8 mg/L and fecal calprotectin level was 957 mcg/g. She also had therapeutic drug monitoring, with ustekinumab trough level 4.5 mcg/mL. Anti-drug antibodies were not tested.

Decision Node 4

- Would you request any other investigation?
- Would you change her ustekinumab dose?
- Would you change to a different therapy?

She refuses to take higher doses of ustekinumab as she has seen no improvement in her symptoms. Accordingly, you start her on vedolizumab in combination with oral methotrexate 12.5 mg weekly. She returns for follow up just before her fourth dose and reports that her symptoms persist, with increasing drainage from her fistula. She sees a poster in your waiting room advertising a clinical trial for a new JAK inhibitor and likes the idea of an oral treatment.

Decision Node 5

- When and how do you decide whether vedolizumab is working?
- If vedolizumab fails, what would be your next treatment choice?
- Would you offer her enrolment in the clinical trial?