QUESTION 8

Which of the following is the most appropriate medication to maintain remission in ileocolonic Crohn’s disease?

A. Nicotine
B. Azathioprine
C. Mesalazine
D. Budesonide
E. Cyclosporin

CROHN’S DISEASE

- Inflammatory condition
- Unknown cause (genetic and environmental factors important)
- Can affect any part of GIT
- Transmural, focal inflammation
- Relapsing and remitting course
- Aim of treatment is to induce remission and prevent relapse

MILD TO MODERATE ACTIVE DISEASE

- Oral or parenteral corticosteroids are most effective
- Response rates 60-70% at 12-16 weeks
- Prednisone 25 to 60mg orally weaning to zero over 8 to 12 weeks after a clinical response
- In ileocaecal disease, budesonide controlled-ileal release formulation is also an option, especially in pts with adverse reactions to corticosteroids in past, but expensive and not on PBS
- Budesonide 9mg orally daily reducing to zero over 8-12 weeks after clinical response
- Benefit of aminosalicylates are limited and of doubtful clinical significance
- Metronidazole has a limited effect as a single agent – 20mg/kg orally in divided doses daily
- No evidence for adding antibiotics to steroids

SEVERE ACTIVE DISEASE

- Initially parenteral therapy
- Methylprednisolone 60-80mg IV daily in divided doses or hydrocortisone 100mg IV QID
- Broad spectrum antibiotics often also used though no actual evidence for this
- Change to oral corticosteroids when disease activity has subsided

REFRACTORY ACTIVE DISEASE

- Infliximab has 60-70% response rates
- Response to single infusion lasts 6-8 weeks
- If response, maintenance therapy every 8 weeks is used
- Serious adverse effects can occur and it is expensive
- If still refractory, surgery may be necessary

**CHRONIC ACTIVE DISEASE**

- Consider AZA or 6-MP or MTX (plus folic acid) in pts who do not respond to corticosteroids or those who require prolong steroid therapy
- Onset of action may be delay – should be continue for at least 3-6 months (or 2-3 months for MTX)
- Infliximab also effective
- Consider surgery

**MAINTENANCE THERAPY**

- **AZA, 6-MP** have good evidence
- Azathioprine 2 to 2.5mg/kg daily
- Mercaptopurine 1 to 1.5mg/kg daily
- If not tolerated or ineffective, consider MTX 25mg IM weekly (plus folica acid)
- Requires monthly monitoring of FBE and LFTs
- Infliximab also shown to be effective
- Should not use corticosteroids long-term

**ILEAL MALABSORPTION**

- Extensive ileal disease or resection can lead to bile salt malabsorption → bile salt diarrhoea or steatorrhoea
- Can occur in absence of active inflammation
- Treatment = cholestyramine 4-8g daily to tds
- Can also use loperamide

**BACTERIAL OVERGROWTH**

- Causes diarrhoea and malabsorption
- Augmentin DF or metronidazole or norfloxacin for 1-2 weeks

**PERIANAL DISEASE**

- Fissures, fistulas and abscesses are common
- Surgery often required
- Metronidazole usually used 400mg tds – may be needed for weeks to months +/- ciprofloxacin
- Refractory perianal disease may respond to AZA
- Infliximab is effective in pts with fistulas unresponsive to other treatment

**OTHER TREATMENTS**
- Quit smoking $\rightarrow$ fewer relapses
- Diet important to maintain nutrition, TPN may be required
- Risk of Fe, zinc, B12, calcium, mg, folic acid and vitamin D deficiency – replace as required

Answer: B

**ULCERATIVE COLITIS**
- Mucosal disease
- Confined to colon
- Continuous inflammatory changes extending from rectum

**ACTIVE PROCTITIS OR DISTAL COLITIS**
- Rectal and oral 5-ASA therapy more effective than either alone
- Rectal corticosteroids are added if 5-ASA ineffective
- Continue rectal therapy until symptoms resolve then wean over several weeks
- Consider rectally administered maintenance in pts with repeated relapses
- If no response, add oral prednisolone

**EXTENSIVE UC – MILD TO MODERATE**
- Rectal therapy alone is ineffective for pts with colitis proximal to splenic flexure
- Use 5-ASA +/- prednisolone

**EXTENSIVE UC – SEVERE**
- > 8 bloody stools/day plus at least one of:
  - T>37
  - HR>100
  - Hb<100
  - Albumin<35
- Hospital admission, early surgical consultation
- Methylprednisolone or hydrocortisone for 5-7 days then oral weaning dose
- Deterioration or failure to respond over 3-7 days requires consideration of colectomy
- Can use IV cyclosporine or infliximab in specialist centres
- Avoid loperamide or other antidiarrhoeal and anticholinergic agents and opioids in severe disease as they can precipitate toxic megacolon

**CHRONICALLY ACTIVE DISEASE**
- AZA, 6-MP or infliximab
- Consider surgery
MAINTENANCE THERAPY

- 5-ASA is first line
- AZA or 6-MP second line
- Can consider infliximab if poor response or surgery

5-ASA

- Exact mechanism of action not known but exerts anti-inflammatory action in bowel wall
- Side effects more common at higher doses – nausea, rash, headache, diarrhoea common
- Interstitial nephritis infrequent
- Blood dyscrasias, pancreatitis and hepatitis rare
- Mesalazine, balsalazide, olsalazine and sulfasalazine
- Higher risk of adverse effects with sulfasalazine

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<th>Crohn’s Disease</th>
<th>Ulcerative Colitis</th>
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<tr>
<td>Mild-Moderate Active Disease</td>
<td>Prednisolone Consider budesonide for ileal disease only</td>
<td>1&lt;sup&gt;st&lt;/sup&gt; line: 5-ASA 2&lt;sup&gt;nd&lt;/sup&gt; line: 5-ASA plus prednisolone Use rectal for distal disease</td>
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