Question 7 – Week of January 23

Which of the following statements regarding Budesonide in the treatment of inflammatory bowel disease is false?

A. Budesonide is a glucocorticoid preparation that is structurally similar to prednisone.
B. Budesonide has an approximately 90% first-pass metabolism in the liver and erythrocytes
C. Entocort is a controlled-ileal-release oral budesonide preparation and releases budesonide at pH greater than 5.5
D. Controlled studies have not shown the benefit of oral budesonide for the treatment of active UC
E. About 50% to 80% of budesonide is absorbed in the ileocecal region.

Answer: A

Budesonide is a glucocorticoid preparation that is structurally different from prednisone. It has an approximately 90% first-pass metabolism in the liver and erythrocytes and is converted to metabolites that have little or no biological activity. The resultant low systemic bioavailability translates to significantly less toxicity compared with traditional glucocorticoids. Entocort is a controlled-ileal-release oral budesonide preparation consisting of Eudragit-L-100–coated microgranules with an internal ethyl cellulose component; it releases budesonide at pH greater than 5.5, and about 50% to 80% of budesonide is absorbed in the ileocecal region. There currently is no oral formulation of budesonide that provides optimal release characteristics for the entire length of the colon. Controlled studies have not shown the benefit of oral budesonide for the treatment of active UC.

References:

1. Keller R, Stoll R, Foerster EC, et al: Oral budesonide therapy for steroid-dependent ulcerative colitis: A pilot trial. Aliment Pharmacol Ther 1997; 11:1047.
2. Lofberg R, Danielsson A, Suhr O, et al: Oral budesonide versus prednisolone in patients with active extensive and left-sided ulcerative colitis. Gastroenterology 1996; 110:1713.
3. Feldman: Sleisenger and Fordtran's Gastrointestinal and Liver Disease, 9th ed.chapter 112