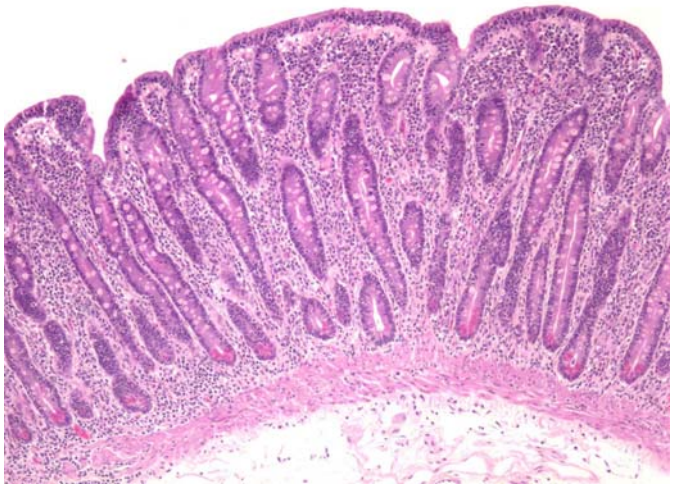
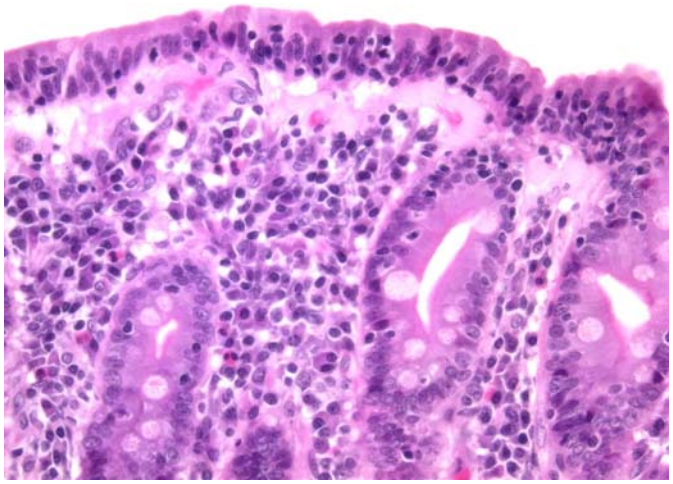
Which of the following is true regarding the condition represented in the small bowel biopsies shown below?

a. HLA-DQ8 is present in 95% if patients with this condition
b. Neurologic manifestations can range from peripheral neuropathy, ataxia and seizures
c. The presence of Brunner's glands in the biopsy specimen helps in the diagnosis
d. Howell-Jolly bodies are frequently seen on peripheral blood smear, as many of these patients require splenectomy during the course of the disease
e. It is cost effective for all patients with irritable bowel syndrome to be tested for this condition





ANSWER: B. Neurologic manifestations can range from peripheral neuropathy, ataxia and seizures

Explanation: The small bowel biopsies reveal evidence of celiac sprue, with villous atrophy, crypt hyperplasia and increased intraepithelial lymphocytosis. HLA-DQ2 (rather than HLA-DQ8) is found in 95% of those with celiac disease, with the remainder often being HLA-DQ8 positive. Various neurologic manifestations of celiac disease have been reported, including peripheral neuropathy, ataxia (known as "gluten ataxia") and seizures associated with occipital calcifications. If Brunner's glands are seen within the biopsy specimen, there can be architectural distortion, which makes histologic confirmation difficult; hence, biopsies should be taken from the second part of the duodenum or beyond. Many patients with celiac disease have Howell-Jolly bodies on peripheral blood smear as a result of functional asplenia or splenic atrophy, rather than from surgical splenectomy. It has been deemed cost effective to screen patients with irritable bowel syndrome for celiac disease if the prevalence of disease is suspected to be greater than 1%, the specificity of the serologic test used is > 98%, and cost of IBS therapy is > $130 per month.