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The Importance of Clinicopathological Features for Differentiation Between Crohn's Disease and Ulcerative Colitis

Authors: Ghada E. Esheba, Ghadeer F. Alharthi, Duaa A. Alhejaili, Rawan E. Hudairy, Wafaa A. Altaezi, Raghad M. Alhejaili Abstract: Background: Inflammatory bowel disease (IBD) consists of two specific gastrointestinal disorders: ulcerative colitis (UC) and Crohn's disease (CD). Despite their distinct natures, these two diseases share many similar etiologic, clinical and pathological features, as a result, their accurate differential diagnosis may sometimes be difficult. Correct diagnosis is important because surgical treatment and long-term prognosis differ from UC and CD. Aim: This study aims to study the characteristic clinicopathological features which help in the differential diagnosis between UC and CD, and assess the disease activity in ulcerative colitis. Materials and methods: This study was carried out on 50 selected cases. The cases included 27 cases of UC and 23 cases of CD. All the cases were examined using H& E and immunohistochemically for bcl-2 expression. Results: Characteristic features of UC include: decrease in mucous content, irregular or villous surface, crypt distortion, and cryptitis, whereas the main cardinal histopathological features seen in CD were: epitheloid granuloma, transmural chronic inflammation, absence of mucin depletion, irregular surface, or crypt distortion. 3 cases of UC were found to be associated with dysplasia. UC mucosa contains fewer Bcl-2+ cells compared with CD mucosa. Conclusion: This study using multiple parameters such clinicopathological features and Bcl-2 expression as studied by immunohistochemical stain, helped to gain an accurate differentiation between UC and CD. Furthermore, this work spotted the light on the activity and different grades of UC which could be important for the prediction of relapse.

Keywords: Crohn's disease, dysplasia, inflammatory bowel disease, ulcerative colitis

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