Survivin and Programmed Death Ligand-1 as Possible Players in the Pathogenesis of Ulcerative Colitis: An Immunohistochemical Study

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Abstract

Background: Ulcerative colitis (UC) is a relapsing chronic inflammatory disorder, with many catastrophic complications. The pathogenesis of UC is not yet well understood. Exploring the exact immunologic pathogenesis of UC may eventually offer new therapeutic options.

Aim of the work: In this study, we proposed that survivin and programmed death ligand (PDL1) may have roles in the pathogenesis of UC.

Materials and methods: The study examined the immunohistochemical expression of both markers in the colonic epithelial cells and lamina propria in 43 cases of UC and 43 cases of non-specific chronic colitis (non-inflammatory bowel disease colitis).

Results: The results uncovered that both survivin and PDL1 expression were significantly expressed in the colonic lamina propria cells in UC cases in comparison to colitis cases (p < 0.001). On the other hand, the expression of PDL1 was shown to be lost in the colonic mucosal cells in UC cases when compared to cases of the control group (p < 0.05).

Conclusion: The study, therefore, concluded that both survivin and PDL1 may play an important role in the UC pathogenesis and hence may be a novel interest in new therapeutic trends.

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