

Evaluation of K- Ras mutation and Fas tissue expression in common neoplastic and non-neoplastic colonic lesions

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Introduction: to study role of K-Ras oncogene and Fas receptor protein in colonic lesions among Egyptians and their impact on grades and stages of colorectal carcinoma (CRC).

Material and methods: This study enrolled 85 cases: control 10, ulcerative colitis (UC) with and without dysplasia 3 and 7, Crohn's disease (CD) 10, bilharzial colitis 15 and CRC 40. Immunohistochemical stain for K-Ras and Fas monoclonal antibodies was done.

Results: K-Ras was negative in control. UC with and without dysplasia, CD and bilharzial colitis showed positivity for K-Ras relative to CRC ($p < 0.05$). CRC showed positive correlation between the extent of expression of K-Ras and both the disease grades and the Dukes' stages of CRC. Seventy percent of control were positive for Fas relative to CRC ($p < 0.01$). UC with and without dysplasia, CD and bilharzial colitis showed positivity for Fas relative to CRC ($p < 0.01$). CRC showed a significant inverse correlation between the extent of positive expression of Fas and both disease grades and the Dukes' stages of CRC.

Conclusions: We concluded that CRC showed the most intense K-Ras expression suggesting that it is playing important role in disease progression. K-Ras mutation was not intensely expressed in UC and CD with dysplasia suggesting that it's not the only factor involved in progression to neoplasia. CRC express significant lower level of Fas relative to other studied groups. This supports the idea of the ability of neoplastic cells to escape the host immune system by avoiding apoptosis and thus can progress to more advanced stages. Evaluation of K- Ras Mutation and Fas Tissue Expression In Common Neoplastic and Non-Neoplastic Colonic Lesions.

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