Inflammatory Cell Reaction: Study Of One Of The Important Prognostic Factors In The Patients Diagnosed Of Colorectal Carcinoma

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Case Report(s)

Objectives:
Present study has been designed to study the prognostic importance of inflammatory reaction in colorectal carcinoma.

Methods:
Resected specimens showing presence of colorectal carcinoma were included in the present study. For this study information about history and investigations done was obtained from the clinical charts. The inflammatory reaction was assessed on the basis of general impression of amount of inflammatory cells along the entire tumor edge away from areas of frank abscess formation and scored as 0=prominent inflammatory infiltrate(dense) and score 1=inconspicuous inflammatory infiltrate (mild/absent) 1. No attempt was made to evaluate the proportion of the various inflammatory cells unless many eosinophils observed in which case the infiltrate were classified as eosinophilic. The presence of abscesses was also noted separately. The presence of perivascular collection of lymphocytes was noted, even if they were located at some distance from the tumor margin itself.

Results and Discussion:
In present study total 37 resected colorectal specimens were studied. None of the case with dense lymphoplasmacytic (mononuclear) stromal infiltration showed lymph node metastasis. 64.7% of the cases with mild or absent lymphoplasmacytic (mononuclear) stromal infiltration showed involvement of lymph nodes. Lack of inflammatory reaction has more prognostic significance than presence of moderate to intense inflammatory reaction 2. According to Murray D. and Dutton J. (1967) local inflammatory reaction found in 52.7% cases were associated with significantly higher survival rate. According to them lack of inflammation at the periphery of colonic carcinomas was associated with worst prognosis 3. Watt and House H.K. (1978) analyzed that the lymphocytic infiltration at the periphery of the colorectal carcinoma had significant difference in distribution associated with absence of lymph node metastasis and lymph node metastasis tumors of moderate differentiation 4. According to Nacopoulou L.(1981) cellular immune competence as evidenced by lymphoplasmacytic infiltration of tumor cells has been associated with increased patients survival in colon cancer. According to them the 5 year survival rate was higher in the presence of lymphoplasmacytic infiltration 5. Zarbo R.J. (1994) 6 and Compton C.C. (1997) 7 showed that lymphocytic response at the edge of the invasive tumor was a favorable prognostic factor. It has been reported by several investigations that patients whose carcinomas were associated with marked lymphocytic and plasmacytic stromal infiltrate had better prognosis and a lower incidence of lymph node metastasis than patients in whom such an inflammatory cellular reaction was mild or absent. Eosinophilic infiltration may be associated with a favorable prognosis 2, 3. We were unable to find any independent prognostic influence of eosinophilic infiltrate.

Conclusion

The present study supports the view that human carcinomas are attracting mononuclear cells to the tumor site and this local reaction may influence prognosis. We feel that it is important to look for lymphoplasmacytic stromal infiltration as a prognostic factor.

References

3. Murray D., Hreno A., Dutton J. et. al., Prognosis in
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