Original Paper

The assessment of prognostic factors in patients with nonmetastatic rectal Adenocarcinoma referred to Omid Hospital (Mashhad), Iran

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Abstract

Background and Objective: Colorectal carcinoma accounts for nearly 10% of all incident cancers. The stage of the disease is the most important prognostic factor. The main purpose of this study was to evaluate the effect of some presumed prognostic factors on the survival rate of patients with nonmetastatic rectal adenocarcinoma.

Materials and Methods: In this retrospective cohort study, 76 patients (m/f:40/36) with nonmetastatic rectal adenocarcinoma whome were referred to oncology department of Omid Hospital between 2001-06 were evaluated. All patients underwent surgical resection and those with T3-T4 and/or lymph node involvement received adjuvant radiotherapy and chemotherapy. Disease free survival was assessed from the date of diagnosis to the date of recurrence using Kaplan-Meyer method. Log-rank test was used to compare survival curves between groups. Multivariate analysis was performed using stepwise backward Cox Proportional Regression method.

Results: Stages 1, 2 and 3 were detected in 4, 34 and 38 cases. 48 patients had well differentiated tumors. 11 cases presented with obstruction. With a median follow up time of 18 months, 17 patients experienced recurrence. For all cases 3-year survival rate was 68.2%. The 3-year survival rate was significantly better for stage 1,2 compared to stage 3, patient without obstruction compared to those presented with obstruction, cases older than 50 compared to younger patients and patients with well differentiated tumor compared to moderately or poor differentiated tumors (P<0.05). The gender and the site of tumor had not significant effects on survival. In multivariate analysis only stage of the disease remained significant predictor of survival (p<0.05).

Conclusion: This study confirmed that the stage of the disease is the most important predictor of survival. Although younger ages (<50), moderately or poorly differentiated tumor and presence of obstruction at diagnosis were associated with decreased survival in univariate calculations, they lost their significance in multivariate analysis.

Keywords: Prognosis, Rectal carcinoma, Metastasis