Microsatellite Instability in the Management of Stage II Colorectal Patients

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Abstract

Background: Up-to-date it is unclear whether stage II colo-rectal cancer patients should receive adjuvant chemotherapy. The presence of high risk features (T4, CEA>5 ng/dl, less than 12 lymph nodes examined) is an indication for Oxaliplatin based treatment. In their absence, there is no consensus, 5 Fluorouracil regimens, or observation only being equally recommended by oncologists. Microsatellite instability is associated with good prognosis in stage II colorectal cancer and also with poor response to 5 Fluorouracil and should be used as a predictive marker.

Methods: We performed a prospective descriptive study on 115 consecutive patients who received surgical resection for colorectal cancer in our clinic during 2011 and 2012 using a risk stratification algorithm based on TNM staging, clinico-pathologic and molecular markers.

Results: From the 44 stage II colorectal cancer patients, 10 cases were classified as high risk, in 26 cases we performed Immunohistochemical analysis that identified 8 patients with low risk microsatellite instability phenotype, with no indication for adjuvant chemotherapy; 26 intermediate risk patients received 5-FluoroUracil regimens.

Conclusion: We believe that microsatellite instability testing provides a useful tool in the goal of better characterizing patients with stage II colorectal cancer in matters of risk of recurrence and likelihood of benefit from chemotherapy.

Key words: microsatellite, instability, colorectal, cancer

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