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gastrointestinal (colorectal) cancers

D24 Is the benefit of adjuvant chemotherapy limited to high-risk stage ii colorectal cancer?

M. Roberto[1], A. Romiti[1], E. Pilozzi[1], G. Balducci[1], M. Ferri[2], S. Uccini[1], R. Falcone[1], G. Campisi[1], P. Mercantini[1], F. Mazzuca[1], F.R. Di Pietro[1], C.E. Onesti[1], A. Botticelli[1], P. Marchetti[1]
[1]*Università degli studi di Roma "La Sapienza", Roma*
[2]*Università degli studi di Roma, Roma*

Background: The adjuvant treatment of stage II colorectal cancer (CRC) is not definitely established. Indeed, according to the lasted clinical practice guidelines, stage II CRC can be managed with either observation or adjuvant fluoropyrymidines. The 5-years disease free survival (DFS) ranges between 70-80% of cases and the absolute DFS benefit of adjuvant chemotherapy (ACT) does not overcome 5%. At present, prognostic parameters such as clinical presentation of disease, T, grading, lymph-node sampling and lymphovascular invasion (LVI) guide the clinical choice. Moreover, the role of microsatellite instability (MSI) is controversial as result of heterogeneous and conflicting data coming from the literature. Aim of the study was to evaluate the outcome of patients with stage II CRC according to prognostic parameters and the treatment received.

Patients and methods: Clinical records of patients with stage II CRC, consecutively observed at our Institution from 2009 to 2015, were reviewed. High-risk stage II was defined according to the presence of one of the following criteria: T4, G3, LVI or <12 lymph nodes retrieved after surgery. Microsatellite instability (MSI) was evaluated by amplification of target sequences. Disease-free survival (DFS) was calculated from time of diagnosis until relapse or death for any cause. Kaplan-Meier method and Cox regression were performed to analyse the effect of variable on DFS.

Results: A total of 252 patients were included: median age 73 years (range 35-96), 53 % male and 47 % female, 141 (61%) high-risk and 90 (39%) low-risk. Out of 121 tested patients: 79% and 21% were MSS and MSI, respectively. Adjuvant chemotherapy was administered to 93 patients: 78% high-risk and 22% low-risk disease. With a median follow-up time of 5 years, median DFS was 15.7 months (1-82) in patients treated with surgery alone and 34.7 months (2-78) in patients receiving ACT. Overall, ACT significantly reduced the risk of relapse (HR = 0.3, P = 0.005). The benefit of ACT was in both low-risk (log Rank: 5.87, P = 0.01) and high-risk stage II disease (log Rank: 2.20, P = 0.13). In a multivariate Cox regression model, gender, ACT and T resulted as independent predictors of DFS (HR= 0.44, 95%CI 0.21-0.96; HR = 0.30, 95%CI 0.13-0.71; HR = 2.86, 95%CI1.24-6.62 respectively).

Conclusions: Adjuvant chemotherapy improved DFS in high-risk as well as low-risk stage II CRC. Further studies are needed to identify those patients who really need to undergo adjuvant treatments.