

Session E. Gastrointestinal (colorectal) cancer

E09 Prognostic role of serum concentrations of high-sensitivity C-reactive protein in patients with metastatic colon rectal cancer: Results from the ITACa trial

S. Carloni, A. Casadei Gardini, A. Passardi, G.L. Frassineti, D. Amadori,
A. Lucchesi
IRST-IRCCS, Meldola

Background: Serum levels of interleukine-6 and C-reactive protein are significantly higher in patients with neoplastic conditions. Therefore, the determination of high-sensitivity C-reactive protein (hs-CRP) has been widely used as a surrogate marker for chronic elevation of circulating cytokines. Increased hs-CRP concentrations have been reported in many conditions, in particular in patients with cardiovascular diseases, obesity, diabetes, autoimmunity, inflammatory bowel diseases and cancer risk. Some authors, on the basis of these findings, have encouraged further studies to clarify

the etiologic and prognostic role of the aforementioned test. Our study has been conducted in patients enrolled in the phase III prospective multicentric randomized “Italian Trial in Advanced Colorectal Cancer (ITACa),” in order to assess hs-CRP levels at diagnosis and their significance with respect to overall survival (OS) and progression free survival.

Methods: Peripheral blood samples from 133 consecutive patients were collected into EDTA tubes. The collection was obtained before the beginning of first line chemotherapy. The supernatant was immediately transferred into a cryovial and stored at -80°C. Samples were thawed and hs-CRP has been measured with Cobas c501 analyzer.

Results: Levels of hs-CRP >13.1 mg/L were associated with a worse median PFS, 8.9 months (95% CI 6.8–9.6) vs. 12.1 months (95% CI 9.3–14.9) in patients with levels <13.1 mg/L ($p < 0.0001$). Similarly, levels >13.1 mg/L were associated with worse median OS, 14.4 (95% CI 11.5–17.1) vs. 28.8 (95% CI 24.3–36.6) in patients with a concentration <13.1 mg/L ($p < 0.0001$). In multivariate analysis, hs-CRP adjusted for baseline factors including age (<70, ≥70 years), gender, ECOG performance status (0, 1–2), tumor localization (rectum, colon), stage at diagnosis (I–III, IV), CT regimen (Folfiri, Folfox), KRAS status (wild type, mutant), site of metastases (liver, other metastases), was found to be independently associated with PFS and OS.

Conclusions: Our study demonstrates the prognostic value of hs-CRP in patients with metastatic carcinoma of the colon and rectum.