**Bevacizumab plus FOLFIRI as first line therapy for Metastatic Colorectal Cancer**

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## Abstract

**Aim of the study**: This prospective study was conducted to evaluate the efficacy and safety of bevacizumab a novel antiangiogenic therapy, when added to first line irinotecan-based chemotherapy FOLFIRI (fluorouracil/folinic acid plus irinotecan) in patients with metastatic colorectal cancer.

**Patients and Methods:** Eligible patients with previously untreated MCRC were treated with the combination of FOLFIRI (irinotecan 200 mg/m2 on Day 1 + 5-fluorouracil (5-FU) 400 mg/m2 + folinic acid 400 mg/m2 on day 1 followed by 5-FU 2400 mg/m2 via 46-h infusion) + BEV 5 mg/kg on day 1, every 2 weeks. The combination was given every 2 weeks until the occurrence of grade 3/4 toxicity or tumor progression. Tumor response and toxicity were assessed.

**Results:** The present study included 24 patients with previously untreated MCRC. This study was carried out in the Clinical Oncology Department, Ain-Shams University Specialized Hospital between February 2010 to September 2011. There were 17 males and 7 females, the median age was 47 years (range 29-68 years), with a median ECOG PS of 1. Most of the patients had metastatic disease at initial diagnosis. The overall response rate was 37.5%. Two patients (8.33%) achieved complete response and 7 patients (29.17%) achieved partial response. All objective responses were evident on the first radiologic evaluation performed after the 3 initial treatments. Six patients (25%) had stable disease and 9 patients (37.5%) had disease progression. Median PFS and OS were 7 months and 20 months, respectively while the median duration of response was 8.2 months. Survival analysis according to the different prognostic factors was done, it was found that responders showed significantly better OS and PFS ($p$=0.01). Overall toxicity was acceptable; none of the patients discontinued treatment or had dose reduction because of side effects or poor compliance. There were no grade 3/4 hematologic toxicities. Non-hematologic grade 3 events were noted in 5 cases (20.83%) as severe fatigue in 2 patients (8.33%) and hypertension in 3 patients (12.5%). Importantly, we did not observe any thrombotic complications, bowel perforation or severe bleeding other than epistaxis in 1 patient (4.17%).

**Conclusions:** The addition of bevacizumab to FOLFIRI as first-line treatment in patients with mCRC improves response rate, progression free survival and overall survival with acceptable toxicity