

Resource Summary Report

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VASCULAR ENDOTHELIAL GROWTH FACTOR PLASMA LEVELS IN PATIENTS WITH CANCER OF THE LEFT COLON SUBMITTED TO OPEN OR LAPAROSCOPIC SURGERY

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Protocol Information

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Summary: Background: VEGF is elevated in plasma of colon cancer patients and increases after surgery. This study's purpose was to determine plasma VEGF levels before, during, and after open and laparoscopic colorectal surgery performed for left colon cancer (CD). Patients and methods: a multicenter, prospective, observational, non-randomized study was planned to evaluate samples obtained preoperatively, intraoperatively, and on postoperative days (1, 3, 7, 15, 30). VEGF-A165 values were determined via ELISA. Statistical analysis was a repeated Anova with interactions. Results: the recruitment finished in 4 years (71 patients). Baseline plasma VEGF-A165 mean values (pVmv) resulted not significantly different in patients submitted to laparoscopy (125.4 pg/ml $\pm$ 47.7) and laparotomy (116.3 pg/ml $\pm$ 28.9). Intraoperatively, the highest difference was registered at the end of operations. In the 30-days postoperative period, the pVmv resulted significantly lower ($G-G=0.45$) in patients submitted to laparoscopy than in patients submitted to laparotomy ($F= 144.6$, p Conclusions: the trial supports the hypothesis that cancer and surgical trauma are related to production of VEGF-A165 and demonstrates that open surgery, in comparison to laparoscopy, is a stronger promoter of VEGF release.

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