The effect of Triclosan coated polyglactin 910 suture on incidence of surgical site infection in patients after colorectal operations

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Surgical site infections (SSI) are defined as infections that occur 30 days after surgery. They are among the most common healthcare-associated infections. The aim of our study was to evaluate antimicrobial efficiency of Triclosan coated Polyglactin 910 suture in our patients with colorectal cancer. In our prospective study participants were patients of our surgical departement which underwent colon resection for diagnosed colorectal cancer. For abdominal closure in half of patients Polyglactil 910 coated with triclosan was used and in the other half Polyglactil 910 without triclosan. The occurrence of SSI among groups were observed. Aswell, duration of hospitalization, early postoperative leukocyte and CRP levels were observed. The mean hospitalization period was 11,7±1.2 day in the Triclosan group and 16.4±2.2 in the Non - triclosan group. In both groups lekocyte and CRP levels were similary elevated on 2nd and 5th postoperative day. Higher average leukocyte and CRP levels were found in first group on 7th and 10th postopetaive day. Significantly less SSIs were seen in Triclosan group compared with the Non - triclosan group (10,81% vs 22,2%). SSIs are associated with longer postoperative hospital stays, may necessitate additional surgical procedures, may require intensive care, and result in higher attributable morbidity and mortality Our study confirmed that patients in which abdominal wall was closed with triclosan coated suture had much better results, less incidence of SSI, shorter hospitalization time and better cost effectiveness.

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