

ABDOMINAL SURGICAL SITE INFECTION AND ADVANCED ANTIMICROBIAL DRESSINGS

Roberto Biffi, Liliana Tadini, Marina Mancini, Simonetta Pozzi, Ugo Pace, Bruno Andreoni, Pasquale Misitano
Istituto Oncologico Europeo, Milan, Italy

Introduction: infection on incisional surgical sites still represents a negative event affecting post-operative mortality, morbidity, length of hospital stay and costs.

Aim: assess the role of an advanced antimicrobial dressing containing ionic silver on the rate of surgical site infection compared with traditional local treatment.

Method: observational prospective study. Patients undergoing elective resection for colorectal cancer, with class II – III surgical wound classification, from April 2006 to December 2006 were included in the study. dressing applied aseptically on the primary closed surgical wound in the operating room. Dressing was removed at patient's discharged on day 7. A post-discharge surveillance was performed at 30 days. Surgical site infection was diagnosed according to CDC's recommendations. Data collected were compared with historical data from internal Hospital Infection Committee.

Measures: demographic and clinical data were recorded such as wound classification, number of drainage sites, local and systemic signs of infection, aspect of perilesional skin, quantitative microbiologic assessment. Other variables were length of postoperative stay, mean wear time of the dressing and number of dressings used, time spent for dressing change. Digital images were collected for objective assessment of the wound.

Results: rate of incisional wound infection recorded by internal Hospital Infection Committee in the previous year (April 2005 - March 2006) was 22.9% (179 procedures – 41 surgical wound infections). In the observational period this rate was lowered to **4.1% (96 procedures – 4 surgical wound infections)**. No local adverse events occurred during the observational period.