

P 21

COMPARATIVE EVALUATION TO DETERMINE THE EFFECTIVENESS OF A HYDROFIBRE**** DRESSING* COVERED BY A FILM VERSUS A TRADITIONAL ISLAND DRESSING FOLLOWING TOTAL KNEE REPLACEMENT SURGERY

Emilie Jonxis, Mieke van der Vlugt

Diaconessenhuis Leiden, Leiden, Netherlands

Aim: To assess the performance of a hydrofibre**** dressing covered with a film dressing, compared to the traditional method of dressing with a traditional island dressing, after the implantation of a total knee replacement prosthesis. The following issues were evaluated: 1) the number of occasions on which the dressing was changed during admission; 2) the occurrence of blister formation around the incision.

Method: In the period 1 January 2006 to September 2006, 25 complete knee prosthesis patients received a postoperative dressing consisting of 4 layers of hydrofibre**** dressing covered with a film dressing (on both the incision and the drain incision). This group was compared with 25 patients operated on before 1 January 2006, who received a dressing consisting of a traditional island dressing. Data from both groups were obtained from medical reports.

Results: Less number of blisters with the hydrofibre**** / film dressing (4%) compared to the group with the island dressing (20%). The group of patients that were treated with hydrofibre**** / film dressing needed fewer dressing changes. The average number of dressing changes needed in the traditional dressing group was 6.1 compared with 2.3 changes in the hydrofibre****/ film group.

Conclusion: Examination of medical case notes showed that the use of a hydrofibre dressing*/ film dressing** combination following total knee replacement surgery led to a reduction in the occurrence of postoperative blisters and a reduction in the number of dressing changes required during hospital admission when compared with the use of a traditional island dressing***.

*Aquacel **Tegaderm® (3M) ***Mepore®(Molnlycke Health Care AB) ****Hydrofibre®

P 22

SILVER-CONTAINING HYDROFIBRE** DRESSING* IN THE TREATMENT OF SURGICAL SITE INFECTION IN CARDIAC SURGERY

Martin Simek, Lenka Jecminkova, Petr Nemecek, Martin Kalab, Ivo Flugler, Pavla Grafova
Dept of Cardiac Surgery, University Hospital Olomouc, Olomouc, Czech Republic

Aim: Silver-containing hydrofibre** dressing* has been designed to combine optimal moist wound environment with a broad-spectrum antimicrobial activity of ionic silver including antibiotic-resistant microorganisms. The aim of our prospective study was to evaluate treatment protocol involving primary application of silver-containing dressing to infected wounds following cardiac surgery.

Methods: From September 2006 to January 2006, 25 consecutive patients with surgical site infection, were enrolled into the study. All wounds were initially mechanically debrided and consecutively dressed by a silver hydrofibre dressing* for every 48-72 hours until wounds were considered to be free of infection (decline of serological inflammatory parameters, negative bacteriological cultures, local signs of healing).

Finally, wounds were surgically closed. Fifteen patients (60%) were treated for superficial sternal infection and 10 patients (40%) for leg-wound infection. The median age was 67.7±7 years and the median BMI was 30.4±3. Seventeen patients were women (70%) and diabetes was present in 13 patients (52%). The median wound surface area was 61.3±39 cm².

Results: Twenty three patients (92%) were successfully healed. The median number of dressing changes was 5.8±3 days and the median of treatment time until surgical closure was 13.5±7 days. One patient (4%) was re-admitted for fistula 3 weeks after wound closure and in one case (4%), the treatment protocol had to be changed for unsatisfactory effect on Pseudomonas infection.

Conclusion: Providing optimal moist wound environment and sustained antibacterial effect, a silver hydrofibre dressing* significantly reduced number of dressing changes as well as trauma to the patients upon dressing removal. Silver-containing dressing should be considered as a primary treatment modality for surgical site infection instead of local application of antiseptic solution.

*Aquacel™ Ag **Hydrofibre®