IMPLEMENTING A NEW WOUND DRESSING IN A DISTRICT GENERAL HOSPITAL USING EVIDENCE BASED MEDICINE

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Introduction: There is growing evidence in the literature that certain modern dressing combinations are more clinically effective than traditional gauze with adhesive dressings, following orthopaedic surgery. The pre-existing standard dressing in our hospital was traditional gauze with adhesive, which is commonly used in UK hospitals. We conducted a prospective, comparative study, which clearly demonstrated clinical benefits using the hydrofibre/hydrocolloid (HF/HC) combination, in 75 consecutive elective and emergency orthopaedic procedures. Accepting this as a new standard of care, we then had to implement the new dressing into our current practice.

Aim: To implement a new standard of care for wound dressings using evidence based medicine, for orthopaedic procedures in a district general hospital.

Methods: After a literature review, we conducted a prospective study comparing traditional gauze with adhesive dressing to the new HF/HC dressing. The results were convincing for the HF/HC dressing, and the results were presented by the clinical director of orthopaedics at a hospital meeting where ward nursing staff, theatre staff, pharmacy and orthopaedic consultants and trainees were present. It was unanimously decided that the HF/HC dressing would be the standard of care. All relevant parties involved in approving the change, ordering stock, and using the dressings were present.

Results: A prospective, comparative study was conducted between October 2007 and January 2008 involving 75 consecutive patients who were admitted for either emergency or elective orthopaedic surgery. Outcome measures included the incidence of blistering (HF/HC 1%, Traditional 21.3%), wear time (HF/HC 4.1 days, Traditional 1 day), number of dressing changes (HF/HC 0.94, Traditional 4.6), delayed discharge due to wound problems HF/HC 0%, Traditional 5.6%) and surgical-site infection (SSI) rate (HF/HC 0%, Traditional 5.6%) and were in favour of the HF/HC combination.

Discussion: The HF/HC dressing combination demonstrated many significant clinical advantages over the traditional dressing and it was decided that this would be new standard of care for wound dressings in orthopaedics in our hospital. To implement this change in practice, we used evidence based medicine and then a multidisciplinary approach, involving parties responsible for making the decision to order the products; orthopaedic consultants and trainees; along with ward and theatre nursing staff who would be handling the dressing. We are now in the process of collecting long-term follow up data using the HF/HC dressing which will hopefully convince other orthopaedic units to evaluate their currently available dressings and possibly consider auditing them against this new standard of wound dressing.