Evaluation of a New Surgical Post-Operative Foam Island Dressing in 14 Patients Undergoing Elective Gynaecological Surgery

Introduction

Wound care is complex and challenging requiring a holistic approach to aid clinical decision making and post-surgical wounds are no exception. Wound care outcomes such as patient comfort, reduced pain on dressing change and enhanced freedom to bathe is not always regarded with due priority when dressing are applied in theatre. Furthermore, women undergoing surgery have genuine concerns regarding the risk of a hospital acquired infection. Another key challenge in post-surgical wounds is skin blistering prevention which has largely been related to dressing application techniques and dressing materials (Tustanowski J. 2009, Clark M. 2009, Waring M. and Butcher M. 2011). Pre-operative assessment is paramount in ensuring that all the risk factors that may have an impact on any individual to heal are recognised early and have been addressed prior to surgery. Patients should be offered choices about their wound care during and following discharge from Hospital.

In January 2011 4,703 caesarean sections were carried out in the United Kingdom (Department of Health; The Office for National Statistics 2010/11).

Methodology

Nurses evaluated post-operative dressings on 14 patients in a female surgical ward undergoing elective gynaecological procedures in March 2011. Clinicians rated the dressing performance as, good, average or poor. Staff evaluated the packaging, ease of application, adhesive properties, conformability, ease of removal and skin integrity including blistering. Patient centred outcomes were measured on a numerical scale 1-3 (1=poor, 2=average, 3 =good) quality of life included comfort, conformability, skin integrity, blistering and bathing. (Fig 2) 86% found the dressing stayed in place and was comfortable whilst having a shower.

Results

Clinicians and patients rated skin protection and shower proof capabilities of the dressing at 86% patient comfort and ease of removal was 79% effective. Packaging and ease of application was rated as good 50%, however 21% and 36% respectively had not completed the evaluation form in both these criteria. The majority of nurses found the dressing performed well, only one clinician noted that it was difficult to apply the dressing. This patient had a body mass index of 35 and this was thought to contribute to the difficulties of application. This is supported by the finding of Johnson et al (2006) who stated BMI and method of wound closure can have an impact on SSI.

All patients were offered a shower post-op day 1-3 depending on mobility and pain score. There was no recorded blistering or wounding infection during this study.

Patient’s response

All patients that had completed the evaluation form found the dressing to be comfortable and conformable. One patient commented that she would recommend this dressing to others: - “It was so comfortable I forgot I had a dressing on especially as it remained in place even after showering.” 100% of patients that had filled in the evaluation form reported no maceration, blistering or pain during this study (two patients had not completed the form).

Conclusion

NICE have recommended that at the end of an operation “surgical incisions anticipated to heal by primary intention should be covered by a film membrane, with or without a central absorbent pad” (NICE 2008b:1).

Film membrane type dressings offer a number of advantages over conventional dressings in that they:

- Provide a barrier to contamination
- Allow post-operative inspection of the periwound area
- Conform to body contours particularly in the lower abdomen (in this study)
- Absorb exudate
- Reduce pain on dressing change
- Protect newly formed tissue
- Maintain optimal moist wound environment without causing maceration surrounding skin
- Permeable to moisture and gas.

NICE (2008) recommend that “dressings should remain in place for a minimum of 48 hours”. The importance of this was demonstrated in a study in Maidstone Kent of 2,382 caesarean section procedures which compared dressing practice between two maternity units, when the health care professionals left the dressing in situ in excess of 48 hours there was a marked reduction in both infection and post-operative complications (Gregson H. 2011).

The new film foam island dressing allowed the nurses to visualise the surrounding skin, thereby making it easier to judge the presence of surrounding skin. Some exudate was noted by day 3 in majority of patients, this is normal and part of the inflammatory wound healing process following surgery. No patients showed clinical signs of maceration or infection during this study. The importance of patients being able to shower post-operatively, with comfort and conformability was rated highly by the patients and staff.

It is important to ensure that staff are trained in implementing best practice (Gregson H. 2011). Industry offers training to all staff using their products. Modern post-operative dressings can improve patient outcomes and careful selection may help to reduce the risk of infection particularly if left in situ in excess of 48 hours (NICE 2008). Ensuring evidence based best practice for our patients and meeting their individual needs remains the cornerstone of nursing care. All nurses in this study stated they would be happy to use this dressing in clinical practice and would recommend it on their formulary.

References


http://www.Amarok-uk.co.uk/Ease/linkedContentServer.html?F=152&categoryID=204


Waring M, Butcher M. An investigation into the conformity of wound dressings. Wounds UK. 2011; Vol 7/No 2 pg 14-24

Dressing discussed - C utter Post-Ops with support from Aspen Medical Europe Ltd.