

Letter to the Editor

DRY WOUNDS MATTER: THE USE OF OCCLUSIVE STERILE SANITARY NAPKIN DRESSING IN HIP AND KNEE REPLACEMENT WOUNDS

The worst fear of a joint replacement surgeon is infection. Many factors are known to contribute to the development of infection in a surgical set-up. Post-operative wound soakage is one of them. Wet wounds lead to repeated dressing, exposing the wound for contamination, risk of infection and increased length of hospital stay (1). Therefore any attempt to avoid this scenario is desirable. We report the use of occlusive, sterile sanitary napkins for dressings in total hip and knee replacement wounds.

Commercially available sanitary pads are sterilised individually (Figure 1) using ethylene trioxide (ETO) for 24 hours. These pads are directly applied to the surgical wound (Figure 2) and affixed to the skin using large Tegaderm transparent dressings (3M, St Paul, MN). Occasionally, two napkins are used depending on the length of the incision. All dressings are changed in the ward usually by 48 hours post-operatively and again, if there is any soakage (Figure 3) of the dressing. We compared this form of dressing with standard ward gauze dressings.

Demography of the data is presented in Table 1. Our results show that the use of napkin for dressings has reduced the number of dressings, significantly, before staples removal.



Figure 1. Sanitary napkins in a sterile environment.



Figure 2. A hip replacement wound dressed with sterile sanitary napkin and occlusive Tegaderm dressing.



Figure 3. Demonstration of wound soakage by pressing the edge of the wound. This is an indication for change of dressing.

Wound infection can be a dreaded complication after any joint replacement. Wet surgical wounds are a major concern in the immediate post-operative period. Any attempt to keep the wound dry and clean in the post-operative period is, therefore, desirable. In this direction, using hydrofibre dressings have been reported to be effective in reducing the number of dressings in patients with lower limb arthroplasty (1). However, these dressings are expensive and need special manufacturing techniques.

The use of sterile, occlusive sanitary napkin for dressing in our set-up has facilitated us to manage the joint replacement wounds very effectively. This method is inexpensive and reduces the number of man hours, and we

Table 1 Results of comparison between standard gauze and sanitary pad dressing groups

Parameters	Standard gauze dressing group	Sterile sanitary pad dressing group	P value
Number (joints/patients)	20/13	20/14	NS
Procedure	2 THAs, 18 TKAs	7 THAs, 13 TKAs	0.12*
Mean age (years)	65.3	67.2	0.51 [†]
Mean BMI	29.3	29.07	0.82 [†]
Mean hospital stay (days)	5.3	4.8	0.13 [†]
Mean number of dressing changes before suture removal	4	2.5	0.0001[†]

BMI, body mass index; THA, total hip arthroplasty; TKA, total knee arthroplasty.

P value of 0.0001 suggests that there is significant difference in the mean number of dressing changes between the two groups, indicating that sanitary napkin group patients needed fewer dressing changes before suture removal.

*Fisher's exact test.

[†]t-Test.

believe, that it also reduces the overall cost of the treatment.

Convinced by the impressive performance of this dressing in joint replacement wounds, the authors recommend this method for routine primary and revision joint replacements.

Vijay D Shetty MS
Hiranandani Orthopaedic
Medical Education (HOME),
Dr LH Hiranandani Hospital,
Hiranandani Gardens,
Powai, Mumbai 400076,
India
vijaydshetty@gmail.com

REFERENCE

- 1 Ravenscroft MJ, Harker J, Buch KA. A prospective, randomised, controlled trial comparing wound dressings used in hip and knee surgery: Aquacel and Tegaderm versus Cutiplast. *Ann R Coll Surg Engl* 2006;88:18–22.