

ADAPTIC®

LEVEL ONE - RCT STUDY

A comparison of three primary non-adherent dressings applied to hand surgery wounds

Terrill, P.J. and Varughese, G. J Wound Care 2000, 9(8): 359-363

KEY POINTS

- A multicentre RCT comparing **ADAPTIC®**, Jelonet and Mepitel (all non-adherent primary dressings) in hand surgery wounds (108 patients)
- **ADAPTIC®** was easier to remove, required less soaking, was less painful to remove and caused less maceration than Jelonet (significantly different) and Mepitel (not significant)
- **ADAPTIC®** had a significant advantage over Jelonet in terms of performance and is recommended for routine usage as a hand dressing
- Mepitel performed similar to **ADAPTIC®** but was not significantly better than Jelonet, and was significantly more expensive than both dressings

STUDY OBJECTIVE

A comparison of 3 non-adherent dressings (**ADAPTIC®**, Jelonet and Mepitel) with regards to ease of application and removal, pain (upon removal) and wound appearance.

METHODS

Randomised controlled prospective open-labeled study

- 108 patients including children following elective or emergency hand surgery, randomised between 3 non-adherent dressings
- **ADAPTIC®** – cellulose acetate fiber dressing coated with petrolatum emulsion
- Jelonet – traditional paraffin-impregnated gauze
- Mepitel – polyamide net dressing impregnated with silicone gel

Assessment criteria included

- Ease of removal
- Whether dressing needed soaking before removal
- Degree of blood staining (on secondary dressing)
- Wound appearance
- Pain

Healing rate was not assessed, as most wounds were suture lines.

RESULTS

Ease of application:

- 94% Jelonet dressings were considered very easy to apply, compared to 79% for **ADAPTIC**[®] and 76% for Mepitel. However all dressings were considered quite easy to apply.

Ease of removal:

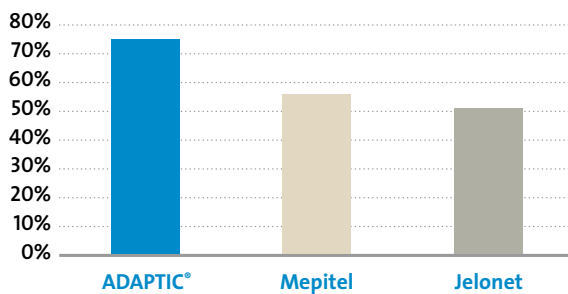
- 28/32 (88%) described **ADAPTIC**[®] as being 'very easy to remove', compared to 27/32 (84%) for Mepitel and 20/35 (57%) for Jelonet; significant differences measured between **ADAPTIC**[®] and Jelonet ($p < 0.01$).
- Saline soaking was required in 6% patients (2 cases) for **ADAPTIC**[®], compared to 9% (3 cases) for Mepitel and 28% (10 cases) for Jelonet. This was significantly different between **ADAPTIC**[®] and Jelonet ($p < 0.05$).

Pain upon removal:

- Significantly less pain was associated with the removal of **ADAPTIC**[®] than Jelonet ($p < 0.05$); comparison of Mepitel to Jelonet was not significant.
 - **ADAPTIC**[®] – 75% patients experienced no pain; mean pain score = 0.5 ± 0.17
 - Mepitel – 56% patients experienced no pain; mean pain score = 1.28 ± 0.38
 - Jelonet – 51% patients experienced no pain; mean pain score = 1.37 ± 0.34

Wound appearance:

Proportion of wounds with pain-free removal (zero pain score)



- **ADAPTIC**[®] and Mepitel showed less evidence of inflammation and infection along the suture line compared to Jelonet; these differences were not significant.
 - **ADAPTIC**[®] – 6% signs of inflammation, 0% infection
 - Mepitel – 6% signs of inflammation, 3% infection
 - Jelonet – 26% signs of inflammation, 5% infection

CONCLUSIONS

ADAPTIC[®] had a significant advantage over Jelonet in terms of performance and is recommended for routine usage as a hand dressing.

ADAPTIC[®] was easier to remove, required less soaking, caused less wound maceration and resulted in little or no pain to the patient upon removal.

Mepitel performed similar to **ADAPTIC**[®] but was not significantly better than Jelonet, and was significantly more expensive than both dressings.