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helps healing.

Safe wound protection in daily practice

Our professional range of post operative dressings



Foreword - Surgical site infection



The Surgical Site Infection Guideline (NICE) was produced in 2008 in an effort to ensure that all patients having surgical procedures, in whatever healthcare setting, would be managed through all phases of their surgical journey in an optimal way. Importantly this guidance also specifically included advice on the use of wound management materials (dressings) both for the management of surgical wounds but also for the prevention of surgical site infections (SSIs). Why?

Infections that occur in the wound created by an invasive surgical procedure are generally referred to as surgical site infections. SSIs are one of the most important causes of healthcare-associated infections (HCAs). A prevalence survey undertaken in 2006 suggested that approximately 8% of patients in hospital in the UK have an HCAI. SSIs accounted for 14% of these infections and nearly 5% of patients who had undergone a surgical procedure were found to have developed an SSI. ⁽¹⁾ However, prevalence studies tend to underestimate SSI because many of these infections occur after the patient has been discharged from hospital. SSIs are associated with considerable morbidity and it has been reported that over one-third of postoperative deaths are related, at least in part, to SSI. ⁽²⁾ However, it is important to recognise that SSIs can range from a relatively trivial wound discharge with no other complications to a life-threatening condition. Other clinical outcomes of SSIs include poor scars that are cosmetically unacceptable, such as those that are spreading, hypertrophic or keloid, persistent pain and itching, restriction of movement, particularly when over joints, and a significant impact on emotional wellbeing. ⁽³⁾ SSI can double the length of time a patient stays in

hospital and thereby increase the costs of health care. Additional costs attributable to SSI of between £814 and £6626 have been reported depending on the type of surgery and the severity of the infection. ⁽⁴⁾⁽⁵⁾ The main additional costs are related to re-operation, extra nursing care and interventions, and drug treatment costs. The indirect costs, due to loss of productivity, patient dissatisfaction and litigation, and reduced quality of life, have been studied less extensively.

The wound healing process

The 'normal' wound healing process has been identified as involving three overlapping major phases:

- inflammation, with cascades of processes that can be further subdivided into early (first 24 hours) and late phases (normally up to 72 hours)
- regeneration
- maturation.

The wound healing process is a complex one that involves many interacting cells, cytokines and growth factors, carbohydrates and proteins, all of which cascade into and act within the wound margins and across the wound bed at different rates and at different speeds.

The key cells that are involved in this process have been identified as:

- inflammation – platelets, neutrophils, lymphocytes and macrophages
- regeneration and maturation – macrophages and fibroblasts, the latter of which are linked with the deposition and regulation of collagen as well as wound contraction (myofibroblasts). Early inflammation (the first 24 hours) begins with haemostasis through vasoconstriction, thrombin formation and platelet aggregation. Platelets release cytokines and other factors that directly influence leucocyte and monocyte activity. Late inflammation (24–72 hours) involves the release of vasodilators and other agents that increase the permeability of the local capillary bed allowing serum and



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white cells to be released into the area surrounding the wound.

The function of this phase of wound healing is to ensure that the wound bed is free of bacteria and other contaminants and to create the optimum environment for the production of granulation tissue and for epithelialisation.

Regeneration follows over the next few days to weeks and this phase of the wound healing process is characterised by an increase in fibroblast mitogenic activity and endothelial cell mitotic activity, with epithelial cell migration and the synthesis of collagen and metalloproteinases. This is a very dynamic balance of synthesis and breakdown of effete tissues and cells.

Maturation, which is also known as the remodelling phase, is the final phase of wound healing and can take up to 2 years to complete. Granulation tissue gradually matures into scar tissue, which over time pales (as the neovascularisation required for healing by scar tissue redresses), shrinks and thins. This repair process is governed by fibroblasts and proteases that normally maintain a balance between deposition and degradation of tissue. Over time, immature collagen fibrils are replaced by mature collagen fibres, improving the tensile strength of the scar tissue, but only to 80% of that of normal skin. ⁽⁶⁾

Wound Dressings for Surgical Site Prevention

The majority of surgical wounds heal by primary intention. On occasions however, a closed surgical wound may separate or may be opened intentionally to allow the drainage of excess fluid or infection (pus) and to assist the management of any underlying pathology.

The main purposes of a surgical dressing when used to cover a wound healing by primary intention are to control any postoperative bleeding, absorb exudate if anticipated, ease pain and provide protection for newly formed tissue.

For healing to take place at an optimum rate, all dressing materials used should ensure that the wound remains:

- moist with exudate but does not get macerated ('not too wet – not too dry')
- free from clinical infection and excessive slough or devitalised/necrotic tissue
- free from toxic chemicals, particles or fibres released from the dressing
- at an optimum temperature for healing to take place (around 37° C)
- undisturbed by frequent or unnecessary dressing changes
- at an optimum pH value.

It is generally considered best practice to cover all surgical incisions post-procedure and recommended, when practical, that this should involve low adherence, transparent polyurethane dressings, which protect the wound and give the opportunity to check the surgical incision site for any signs of wound infection without having to disturb the dressing itself. These dressings can be left in place for between 3 and 5 days, during which time the epithelialisation process may be completed in a wound healing by primary intention.

Dressings for the immediate post operative phase should incorporate an integral central pad of absorbent material (island dressings) if oozing of fluid (blood or exudate) from the incision site is anticipated. These island dressings combine the advantages of transparent low-adherent polyurethane film dressings while also having the ability to absorb small amounts of excess exudate, aiding the normal debridement process in the wound and help to prevent any adverse effect on healing caused by surface cooling, for example. The advantages of using low-adherent transparent polyurethane film dressings in general are as follows:

- they allow postoperative inspection of the wound without disturbance of the dressing
- they make the wound 'waterproof' to allow early showering or bathing while at the same time acting both as a barrier to possible external bacterial contamination and to prevent cross contamination to other patients
- their low adherence allows relatively painless and easy removal when there is a need for a dressing change, such as when there is a build-up and leakage of exudate (oozing) from the incision site
- they prevent any material from further contaminating the wound
- they maintain an optimal moist wound environment without causing maceration of the surrounding skin as the dressing material is permeable to moisture and gas.

For the ongoing management of surgical wounds, such as when the initial post operative dressing (as previously indicated) is removed, it is appropriate to consider other wound management materials and these should be chosen following a wound assessment process⁽⁷⁾ that identifies wound healing objectives that may include - control exudate; protect the surrounding skin; control bleeding, reduce bacterial burden; minimise risk of further complications; optimise the local healing environment; protection.

References

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Application overview:

Post-operative fixation	Wound closure	Retention	Cannula
 Hydrofilm®	 Omnistrip®	 Omnifix® elastic	 Hydrofilm® I.V. control
 Hydrofilm® Plus		 Hospicrepe®	
 Cosmopor® E		 Peha-haft® Latex Free	

Hydrofilm® and Hydrofilm® Plus

For the first 48 hours

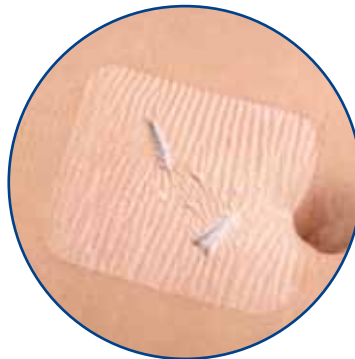


Postoperative risk of infection

Potentially, every fresh wound is an easy target for infection if there is insufficient protection. Wound closure at the surface, which offers sufficient protection from the risk of infection, forms after approximately 48 hours. A prerequisite to this is for the culture medium required for the growth of bacteria to be withdrawn and this will only be successful if perfect wound covering and rest is ensured. It is good clinical practice therefore, to cover the wound with an appropriate interactive dressing for a period of 48 hours unless otherwise clinically indicated. In the majority of clinical situations a semi-permeable film membrane with or without an absorbent island is preferable (NICE, 2008).

Semi-permeable polyurethane film

The skin needs to breathe: Hydrofilm® and Hydrofilm® Plus allow oxygen and water vapour to pass through while still offering complete protection.



Hydrofilm®

The postoperative and primary dressing offers protection and covering of non-exuding wounds. Also suitable as a secondary dressing for fixation.



Highly absorbent wound pad

The wound pad of Hydrofilm® Plus has a high absorption and cushioning effect. The hydrophobic net-like wound contact layer quickly transfers the exudate away while remaining completely dry itself so that the pad cannot stick to the wound.



Hydrofilm® Plus

The postoperative and primary dressing with its highly absorbent wound pad is suitable as a protection for low exuding wounds.

Application



Properties

Water vapour permeability



Adhesive strength



Absorption capacity Hydrofilm®



Absorption capacity Hydrofilm® Plus



Wound protection and infection prevention



Benefits

- Waterproof and impermeable to micro-organisms and bacteria
- Breathable
- Transparent for visual inspection
- Well tolerated by the skin

The Practical Tip

Daily body care made easy!
It's possible to have a shower with the dressing in place

Highly absorbent, fast and reliable Cosmopor® E – the proven wound dressing with microgrid.



The main purpose of surgical dressings are to allow appropriate assessment of the wound postoperatively, to absorb exudates, to ease pain and to provide protection for newly formed tissue (NICE, 2008)

Having covered the wound for the first 48 hours with Hydrofilm®/Hydrofilm® Plus, Cosmopor® E is the perfect/clinically cost effective choice for future post-operative wound treatment. Cosmopor® E a sterile adhesive, island wound dressing which consists of a viscose core providing high absorbency and cushioning. A polyethylene net contact layer (microgrid) prevents adherence to the wound and hypoallergenic fibres, permeable to air and water prevent irritation to surrounding skin.

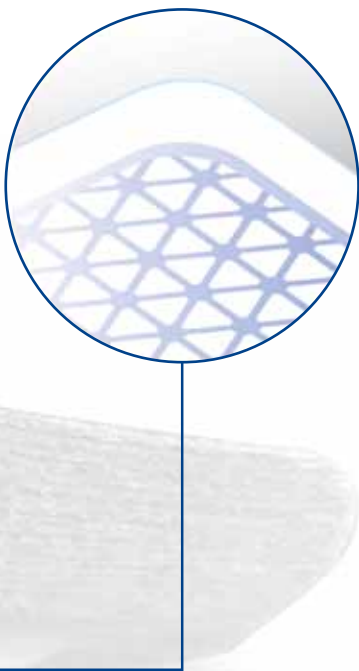


Cosmopor® E

Not only ideal for the post-operative treatment of wounds, but also for the sterile treatment of minor injuries when providing first aid.

Hydrophobic microgrid

The great advantage of the hydrophobic microgrid as a contact layer is that it enables exudate to rapidly flow in to the absorbent pad, whilst remaining absolutely dry. In this way it reliably prevents adhesion to the wound.



Highly absorbent wound pad

The absorbent pad of Cosmopor® E ensures high absorption and excellent cushioning.

Application



Properties

Water vapour permeability



Adhesive strength



Absorption capacity



Wound protection and infection prevention



Benefits

- Does not stick to the wound
- Highly absorbent
- Breathable
- Hypoallergenic
- Especially well tolerated by the skin

The Practical Tip

Cosmopor® stretches in one direction

Omnistrip®

Wound closure, simply done

Hypoallergenic Omnistrip® wound closure strips are quick and easy to use and almost painless for the patient. Omnistrip® are used for the atraumatic closure of minor wounds and surgical incisions requiring primary healing. Omnistrip® adheres reliably, particularly on flexible parts of the body, even during movement, helping the wound to remain closed.

Using Omnistrip® as an alternative to sutures or staples will reduce scarring.



Omnistrip®

The wound closure strip for the closure of primary healing wounds. Omnistrip® also provides support and relief to wound edges. Suitable for all parts of the body.

Application



Properties

Water vapour permeability



Adhesive strength



Absorption capacity



Wound protection



Benefits

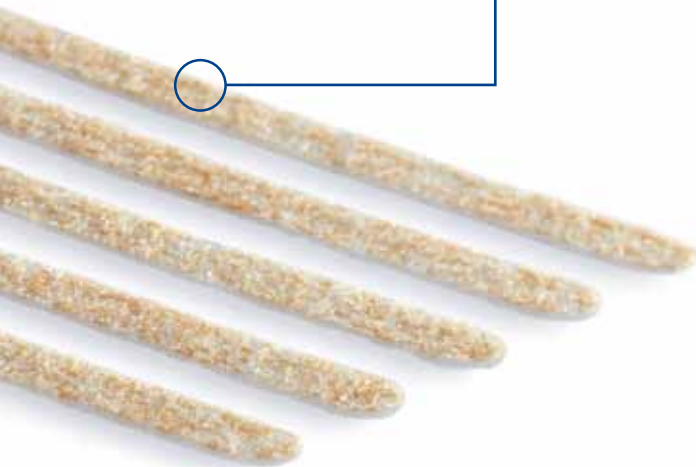
- High adhesive force
- Air and water vapour permeable
- Can be removed almost painlessly
- Well tolerated by the skin

The Practical Tip

Due to its special elasticity, Omnistrip® is also suitable for use on joints.

Highly adhesive, also suitable for hyper-sensitive skin

High adhesive strength and reliable fixation of the wound edges: Omnistrip® is made of non-woven material which is well-tolerated by the skin and coated with polyacrylate adhesive which makes it also suitable for hyper-sensitive skin. The wound closure strips can be removed almost painlessly and without leaving behind a residue.



Omnifix® elastic

Comfortable and uncomplicated

This is how comfortable fixation over a large surface can be. The transverse elastic non-woven fabric allows Omnifix® Elastic to be positioned without creases and adjusts perfectly to all body contours enabling simple and uncomplicated application. The patient benefits from the fact that the non-woven carrier with its synthetic rubber adhesive coating is well tolerated by the skin and comfortable to wear.

Omnifix® elastic

Omnifix® elastic is used for full surface retention of wound dressings, even on parts of the body that are difficult to bandage. It is also suitable for securing medical devices such as probes, catheters etc.



Application aid

Easy to use: a 2cm² measuring grid, printed on the backing paper helps you to cut Omnifix® Elastic exactly to size. The wave cut helps when removing the backing paper



Application



Properties

Water vapour permeability



Adhesive strength



Absorption capacity



Wound protection and infection prevention



Benefits

- Especially soft and comfortable
- Breathable
- Hypoallergenic
- Secure fixation

The Practical Tip

Omnifix® can be cut to any shape and size.

Hydrofilm® I.V. control

Clear, visual cannula fixation

Every puncture site represents a risk of infection and therefore has to be protected and observed. Hydrofilm® I.V. control are adhesive transparent dressings for securing IV cannulas offering reliable protection of the puncture site from water, dirt and bacteria combined with optimal visual control without removal of the dressing. The high adhesive strength prevents slippage of the cannula, so it stays securely in place even for some days.



Hydrofilm® I.V. control – Easy and simple to use.

It takes only two steps to apply the self-adhesive cannula dressing. The dressing offers reliable protection of the puncture site from water, dirt and bacteria combined with optimal visual control. Small amounts of fluid are absorbed by the soft non-woven carrier.

Strong hold. Extra resistant.

The completely laminated non-woven material adheres even more firmly and has a high surface stability. This provides extra strong fixation of the cannula and thus prevents phlebitis.



Application



Properties

Water vapour permeability



Adhesive strength Hydrofilm I.V. control



Absorption capacity Hydrofilm I.V. control



Infection prevention



Benefits

- Reliable fixation over several days
- Waterproof and impermeable to microorganisms and bacteria
- Optimal visual control
- Unnecessary re-puncture is dispensed with
- Easy to apply

The Practical Tip

When secured with Hydrofilm® I.V. control, there is less risk that the cannula slips out of position.

HARTMANN Bandages

For safe and effective dressing retention

Peha-haft® Latex Free

Peha-haft® latex free is the first of its kind! Specially designed for patients prone to allergies and persons allergic to latex, to facilitate all kinds of dressing retention. With a double adhesive effect, Peha-haft® Latex free sticks to itself but not to skin.



There is only one thing you
can do against latex allergy:
Avoid Latex

Peha-haft® latex free offers perfect protection for staff and for patients.

For fixation bandaging, especially on joints and conical or round parts of the body; retention of wound dressings and of orthopaedic padding material, cannulae, etc and for use as support bandage providing light compression.

Hospicrepe®

For Type 2 light support and fixation, look no further than 100% cotton Hospicrepe®.



Hospicrepe® is a cotton crepe bandage ideal for all general bandage requirements including support, pressure and fixation.

The crepe character is achieved with highly twisted 100% cotton yarn in the weft and non-elastic yarn in the warp.

Application - Peha haft®



Properties

- 100% latex free
- 40% cotton 30% viscose 30% polyamide
- High absorption capacity
- Breathable fabric
- No acrylate or chlorine = odourless
- Very kind to skin

Benefits

- Provide safe dressing retention even on joints and conical or round body parts
- No additional fixation of the bandage needed
- Cost saving due to low consumption of material

Application - Hospicrepe®



Properties

- 100% cotton
- Breathable fabric
- Large range of sizes

Benefits

- Two varieties for greater product choice and cost effectiveness
- Woven edges reduce bandage fray


The Practical Tip

With Peha-haft® Latex Free two to three layers are sufficient for a safe fixation


Presentations

POST-OP

Hydrofilm® High MVTR Transparent Film Dressing


Product	Size	Unit	Hartmann Code	NSV Code	PIP Code
	6 x 7cm	Pack of 10	685755	–	342 6665
	6 x 7cm	Pack of 100	685756	ELW293	–
	10 x 12.5cm	Pack of 10	685757	ELW243	342 6228
	10 x 12.5cm	Pack of 100	685758	ELW245	–
	10 x 15cm	Pack of 10	685759	–	266 7350
	10 x 15cm	Pack of 50	685760	ELW246	–
	15 x 20cm	Pack of 10	685761	–	342 6244
	15 x 20cm	Pack of 50	685762	ELW247	–
	10 x 25cm	Pack of 25	685763	–	342 6236
	12 x 25cm	Pack of 25	685764	ELW241	266 7368
	20 x 30cm	Pack of 10	685765	ELW248	342 6251

Hydrofilm® Plus High MVTR Transparent Film Dressing with Absorbent Pad

Product	Size	Unit	Hartmann Code	NSV Code	PIP Code
	5 x 7.2cm	Pack of 50	685771	ELW291	342 4322
	9 x 10cm	Pack of 50	685773	ELW292	342 4330
	9 x 15cm	Pack of 25	685775	ELW303	342 4348
	10 x 20cm	Pack of 25	685778	ELW304	342 4355
	10 x 25cm	Pack of 25	685779	ELW249	342 4363
	10 x 30cm	Pack of 25	685780	ELW250	342 4371


WATERPROOF
Cosmopor® E

Cosmopor® E Sterile adhesive, island wound dressing

Product	Size	Unit	Hartmann Code	NSV Code	PIP Code
	7.2 x 5cm	Pack of 50	900870	EIJ038	273 1222
	10 x 8cm	Pack of 25	900873	EIJ039	273 1255
	15 x 8cm	Pack of 25	900874	EIJ040	273 1263
	20 x 10cm	Pack of 25	900876	EIJ041	273 1289
	25 x 10cm	Pack of 25	900877	EIJ042	273 1297
	35 x 10cm	Pack of 25	900878	EIJ043	273 1305


WOUND CLOSURE

Omnistrip® Wound closure strip


Product	Size	Strips per envelope	Envelopes per pack	Hartmann Code	NSV Code	PIP Code
	3 x 76mm	Pack of 5	50	540681	–	–
	6 x 38mm	Pack of 6	50	540682	–	–
	6 x 76mm	Pack of 3	50	540683	–	353 1944
	6 x 101mm	Pack of 10	50	540684	–	–
	12 x 101mm	Pack of 6	50	540685	–	–
	25 x 127mm	Pack of 4	50	540686	–	–

RETENTION


Omnifix® Elastic, Self-adhesive fabric

Product	Size	Pack	Hartmann Code	NSV Code	PIP Code
	5 x 100cm	Single	900602	–	283 9345
	10 x 100cm	Single	900603	–	286 9352
	15 x 100cm	Single	900604	–	286 9360

Hospicrepe® Crepe Bandage


Product	Size	Pack	Variant	Hartmann Code	NSV Code	PIP Code
	5cm x 4.5m	Pack of 12	233	915561	ECA811	–
	7.5cm x 4.5m	Pack of 12	233	915562	ECA030	–
	10cm x 4.5m	Pack of 12	233	915563	ECA009	–
	15cm x 4.5m	Pack of 12	233	915564	ECA059	–
	5cm x 4.5m	Pack of 12	239	915557	ECA088	–
	7.5cm x 4.5m	Pack of 12	239	915558	ECA089	–
	10cm x 4.5m	Pack of 12	239	915559	ECA090	–
	15cm x 4.5m	Pack of 12	239	915560	ECA091	–

Peha-haft® Latex Free Cohesive, conforming Bandage

Product	Size	Pack	Hartmann Code	NSV Code	PIP Code
	2.5cm x 4m	Pack of 8	932452	EBA061	353 1894
	4cm x 4m	Single	932441	EBA062	347 3956
	6cm x 4m	Single	932442	EBA054	347 3964
	8cm x 4m	Single	932443	EBA055	347 3972
	10cm x 4m	Single	932444	EBA056	347 3980
	12cm x 4m	Single	932445	EBA063	347 3998
	10cm x 20cm	Single	932449	–	–

CANNULA

Hydrofilm® I.V Control High MVTR Transparent Film Dressing

Product	Size	Pack	Hartmann Code	NSV Code	PIP Code
	9 x 7cm	Pack of 50	685741	ELW333	–