

Stoma and continence: Adhesive removers

In England and Wales in excess of £18.2 million is spent annually on adhesive removers (ePACT September to November 2017). Medicines optimisation projects in this area focus on selecting the most cost-effective, appropriate products and avoiding waste. This bulletin reviews the place in therapy of adhesive removers and offers guidance for organisations considering reviewing the prescribing of these products.

Recommendations

- Input from local stoma experts should be sought when determining local policy on adhesive remover prescribing. There are conflicting opinions as to whether adhesive remover use in those with a stoma should be routine, or based on individual circumstances.
- An individual assessment should generally be undertaken prior to the use of a stoma accessory. Stoma nurses are best equipped to determine the cause of sore peristomal skin and recommend effective solutions. An exception to this may be if adhesive removers are offered routinely, where the person is not experiencing any issues with their stoma or peristomal skin.
- Local formularies should guide primary care prescribers to select appropriate and cost-effective adhesive removers.
- Silicone-based, alcohol-free preparations are preferred (see attachment 1 for product types).
- Sprays are generally more cost-effective than wipes.
- Wipes should be available for those that need them, e.g. for people who lack the manual strength or dexterity to use a spray.
- Either a spray or wipes should be prescribed, not both.
- The quantity of adhesive remover required will depend on the frequency of appliance change. As a general rule, one to two cans of spray or 30 wipes are needed per 30 bags (or base plates where a two piece appliance is used).
- Excessive ordering of adhesive removers should be questioned. It may signify that the person is having problems and needs a stoma assessment, or be due to an issue with the repeat ordering process.
- Local agreements should be in place that define the responsibilities of the stoma nurse. Consider including specific responsibilities regarding prompt communication with GPs when the stoma nurse recommends initiation of a stoma care product. Details of the product, expected monthly usage, expected duration of treatment and monitoring arrangements should be communicated to the GP.

Background

Adhesive removers are designed to facilitate easy, non-traumatic removal of adhesive dressings and appliances.¹ They also remove any adhesive residue that remains after dressing or appliance removal.² One of their common uses is to assist with pouch removal in people with a stoma.¹ The availability and use of stoma care accessories, including adhesive removers, has escalated over time. It is widely accepted that accessories such as adhesive removers have a role in stoma care, but their use should be judicious.³ For those that are not stoma-care specialists it can be difficult to know when an accessory is clinically appropriate, which product to select and how much to prescribe.

Medical adhesive related skin injury occurs when the skin to adhesive attachment is stronger than the skin cell to skin cell attachment. The removal of layers of the stratum corneum by adhesives is often called skin stripping. Damage to peristomal skin can be painful. It can also cause wounds that require healing and leave skin at risk of infection.⁴ Those with more fragile skin, such as children and older people, are at greater risk of skin injury from adhesives.⁵ Damage is also more likely where products are removed too quickly or harshly.⁶

Types of medical adhesive remover

Adhesive removers generally fall into three categories:

- Alcohol/organic-based solvents
- Oil-based solvents
- Silicone-based removers.

Historically, adhesive removers contained alcohol.⁷ Alcohol/organic-based solvents rely on the property of the alcohol to dissolve some of the components of the adhesive. They can be drying to the skin and can cause stinging and irritation.¹ Most modern products are alcohol-free.⁷

Oil-based solvents work by slowly wicking into the interface between the adhesive and the skin's surface. After their use the skin needs to be thoroughly cleansed and dried so that further appliances will adhere. Both alcohol and oil-based adhesive removers can be time consuming to use.¹

More recently, silicone-based adhesive removers have been developed.⁶ Silicone-based removers temporarily alter the surface chemistry between the skin and the adhesive, allowing the adhesive to be easily removed with minimum force. Silicone-based removers generally do not dry out or sting the skin.¹

Silicone-based removers are widely accepted as the adhesive remover of choice due to minimal side-effects and efficacy.⁸ Many of the adhesive removers available for prescribing are silicone based, alcohol-free formulations (see attachment 1 for adhesive remover types). However there are some exceptions, and it is important to check the ingredients of individual products being considered for prescribing or for inclusion in a formulary.

Where adhesive removers are needed for children, non-alcoholic preparations should be selected. Alcohol-containing adhesive removers should not be used on small babies.⁹ The use of products containing benzyl alcohol should be avoided in young children, especially neonates.^{10,11} Intravenous administration of products containing benzyl alcohol has been associated with neonatal gasping syndrome. Although systemic exposure following topical use would be expected to be lower, the lower limit for toxicity is unknown.¹¹

Adhesive removers are available as sprays or wipes.¹² Wipes are usually packaged in individual use sachets. Sprays are available as pump sprays, traditional aerosols or 'bag in can' (sometimes called 'bag on valve') sprays. 'Bag in can' sprays look similar to traditional aerosols and are pressurised containers. However instead of the propellant being mixed with the product, the product is kept separate from the propellant within a bag attached to an aerosol valve. The bag is surrounded by pressurised propellant, often air or nitrogen. Potential advantages of 'bag in can' sprays include the ability to spray them from any angle and a high rate of product emptying. They can be less chilling to the skin on application than traditional aerosols, and generally use a non-flammable propellant.¹³

To use an adhesive remover, the edge of the flange (where the appliance adheres to the skin) is lifted slightly and the spray or wipe is used under the flange to release the rest of the adhesive.²

National guidance

Specific guidelines discussing the use of adhesive removers in those with a stoma are not available. However they have an accepted role in managing sore skin around stoma sites.

Opinions vary as to whether all people with a stoma should use adhesive remover routinely. Stoma care guidance from the Association of Stoma Care Nurses UK categorise adhesive removers as routinely recommended accessories.¹⁴ Evidence based on 54 questionnaires in people with a stoma showed that most people found adhesive removers made their appliance easier to remove (see 'Clinical effectiveness' section).¹⁵

However other stoma specialists consider that they are not necessary for everyone.^{9,16} Some advocate basing their use on individual circumstances, e.g. if there is pain on appliance removal, or if skin is fragile and at risk of breakdown.¹⁷

Correct removal of the stoma appliance is essential. Prior to removal, the area should be moistened with water or adhesive remover. The skin should be supported with one hand while gently pulling off the appliance with the other. Peristomal skin should be cleansed with only water; soap is drying and can irritate the skin.¹⁸

Clinical effectiveness

Clinical evidence for the use of adhesive removers in stoma care is limited. No randomised, controlled trials are available in this population. Data are largely derived from case studies and patient or health professional questionnaire evaluations.^{15,19,20}

A service evaluation, conducted in the UK, used a questionnaire to assess patients' opinions of a silicone-based adhesive remover when removing a stoma appliance. Sixty questionnaires were distributed, with 54 returned. Ninety-one per cent of respondents felt the appliance was easier to remove when using the adhesive remover. Most found it easy to use, although a small number of respondents said they did not have enough strength in their hands to operate the spray. Most respondents reported a difference in their skin when using the adhesive remover, although 19% felt there was no difference. Participants used Lift Plus (Opus Healthcare) adhesive remover, although the investigators felt similar results would probably be achieved with any silicone-based adhesive remover. Based on their evaluation the authors concluded that all patients with a stoma should be offered the use of an adhesive remover.¹⁵ Limitations of the service evaluation include its small size, and that outcome measures were subjective rather than clinical.

Stoma assessment

Prior to the use of a stoma accessory it is essential to undertake an individual assessment.¹⁷ Stoma nurses are best equipped to determine the cause of sore peristomal skin. They can ensure that ostomy equipment used is appropriate for the type of stoma, volume, and consistency of the effluent. Proper fitting and adherence of the appliance can also be assessed to lessen the risk of leakage and skin irritation.²¹

As well as skin stripping, there are a number of other potential causes of peristomal sore skin that must be considered. The most common issue is irritant contact dermatitis, caused by ostomy effluent being in contact with the skin. Folliculitis can occur where there is chronic pulling of the hair with removal of adhesive appliances. Careful clipping or plucking of the abdominal hair (usually on men) can help to prevent it. Fungal rashes and allergic dermatitis can also be problematic.²¹

Where there is concern about potential skin stripping the stoma nurse may observe appliance removal and cleansing technique and enquire about the frequency of appliance changes. Causative factors may be addressed with education, a different appliance (e.g. changing from a one-piece to a two-piece appliance where the appliance is being changed too frequently) and possibly the use of accessories such as adhesive removers, barrier products or pastes.²²

Local agreements should be in place that define the responsibilities of the stoma nurse. It may be useful to include specific responsibilities regarding prompt communication with GPs when the stoma nurse recommends initiation of a stoma care product. Specific details could include:

- Product initiated (including product codes).
- Expected monthly usage.
- Expected duration of treatment; or, if long term, date of next review.
- Monitoring arrangements. This should include details of the monitoring requirements if the GP is to undertake monitoring.
- Specialist nurse name and contact details in case of queries.
- Clear arrangements for back-up, advice, and support should be in place.²³

Organisations that have (or are considering having) a manufacturer sponsored stoma nurse working locally should ensure that the agreement does not promote conflicts of interest that could lead to poor practice. For example, the specialist nurse should not be required to recommend the sponsor's products in preference to other clinically appropriate products.²⁴ Stoma nurses should follow relevant local formulary guidance where it is available, unless deviation from it can be justified due to specific circumstances. Reasons for prescribing or recommending non-formulary items should be documented.

Prescribing considerations

Local formularies should guide primary care prescribers to select appropriate and cost-effective adhesive removers.

- Silicone-based, alcohol-free preparations are preferred (see attachment 1 for product types).^{3,8}
- Sprays are generally more cost-effective than wipes.
- Wipes should be available for those that need them, e.g. for people who lack the manual strength or dexterity to use a spray.¹⁵
- Either a spray or wipes should be prescribed, not both.
- The quantity of adhesive remover required will depend on the frequency of appliance change. As a general rule, one to two cans of spray or 30 wipes are needed per 30 bags (or base plates where a two piece appliance is used).¹⁴
- Excessive ordering of adhesive removers should be questioned. It may signify that the person is having problems and needs a stoma assessment, or be due to an issue with the repeat ordering process.

Self-management support

Clinicians should also consider what sources of self-management support are available locally and nationally, in order to signpost people effectively. Organisations providing information and support for those with a stoma include:

- The Colostomy Association: www.colostomyassociation.org.uk
- IA - the ileostomy and internal pouch support group: www.iasupport.org
- The Urostomy Association: www.urostomyassociation.org.uk
- Stomawise: www.stomawise.co.uk

These organisations are an additional resource and are not a replacement for appropriate input from stoma nurses and other health professionals.

Costs

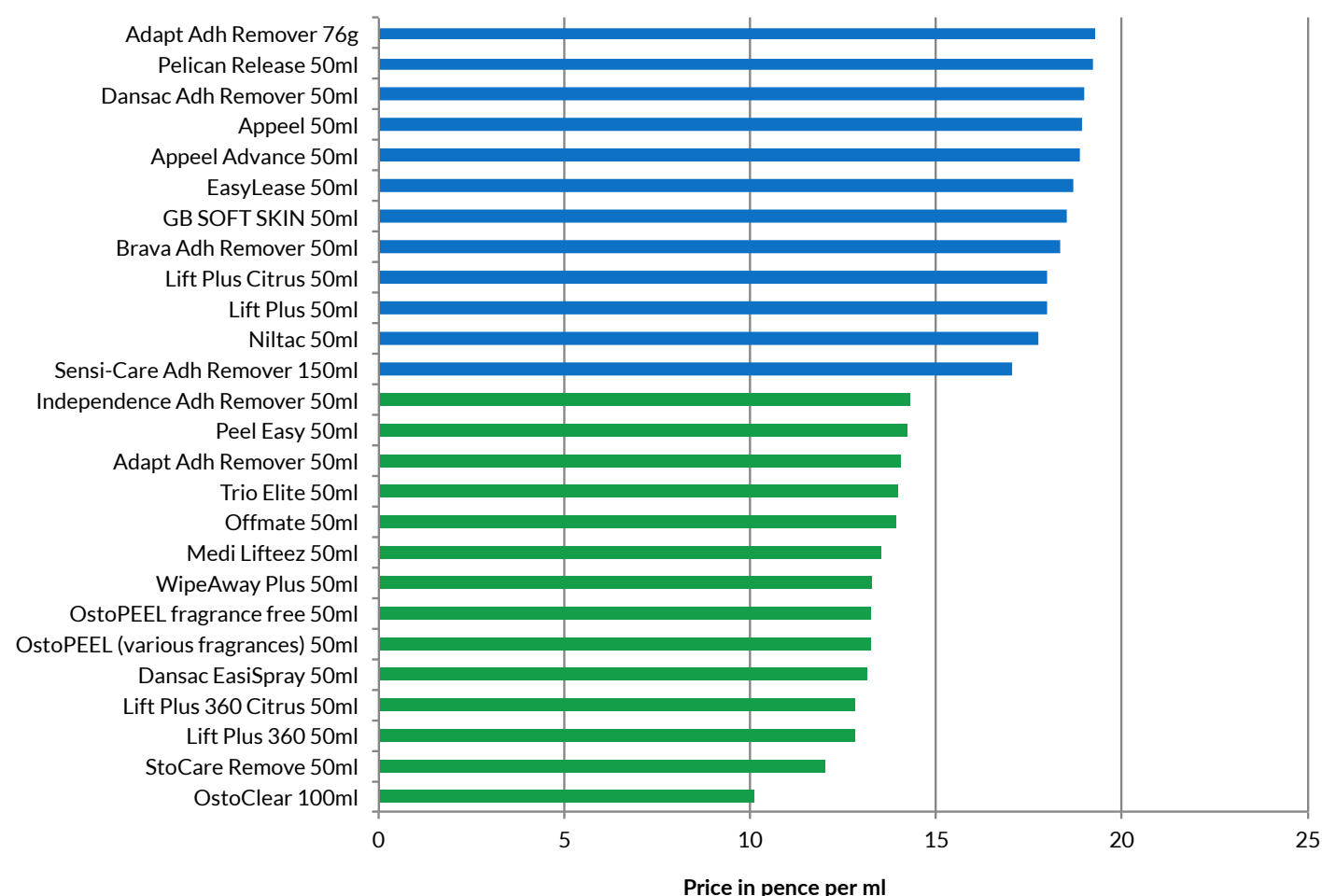
There is a significant difference in cost between different adhesive removers. In general, sprays are less expensive than wipes.

Figure 1 gives the price/ml (or g) of adhesive remover sprays. Figure 2 gives the price/wipe of adhesive remover wipes (prices from the Drug Tariff July 2017).

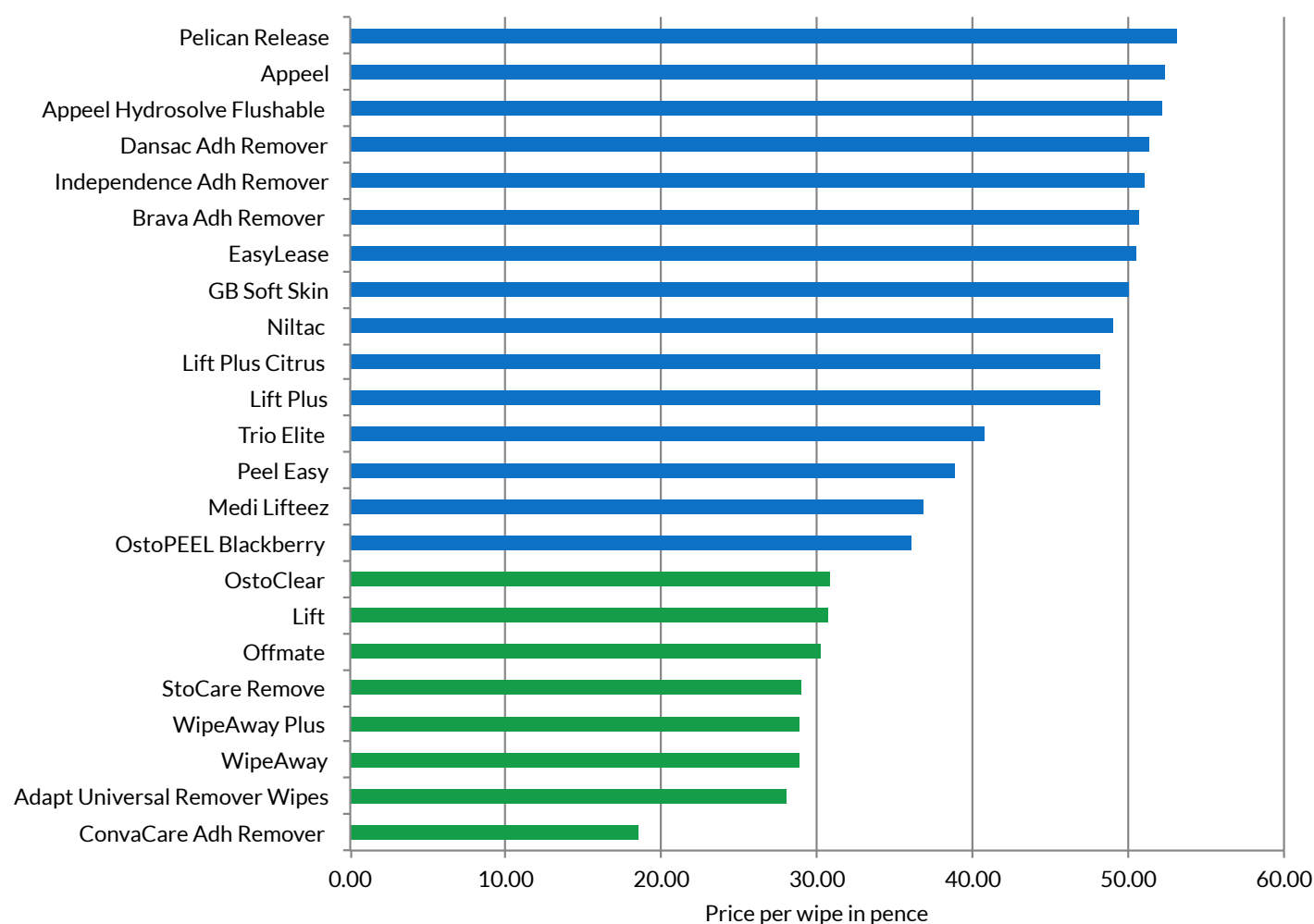
The products vary in their ingredients and are not necessarily interchangeable. Many, but not all, are silicone-based and alcohol-free. See the tables in Attachment 1 for a list of adhesive removers, their type, and whether they contain alcohol. The ingredients of individual products should be checked before being considered for inclusion in a formulary.

Savings (see below) have been estimated based on prescribing of adhesive remover sprays that cost less than 15 pence/ml (or g) for sprays and less than 31 pence/wipe (represented as green bars in figures 1 and 2). Savings are based on product cost and are for illustrative purposes. When selecting products for clinical use, product characteristics must be considered alongside cost.

Figure 1: Adhesive remover sprays



Of the sprays in figure 1 that cost less than 15 pence/ml (green bars), the following are silicone-based, alcohol-free formulations: StoCare Remove, Lift Plus 360, Lift Plus 360 Citrus, WipeAway Plus, Dansac EasiSpray, Medi Lifteez, Trio Elite, Adapt adhesive remover, Independence adhesive remover, Peel Easy and Offmate (see attachment 1).

Figure 2: Adhesive remover wipes

Of the wipes in figure 2 that cost less than 31 pence/wipe (green bars), the following are silicone-based, alcohol-free formulations: Adapt Universal Remover Wipes, WipeAway Plus, StoCare Remove and Offmate (see attachment 1).

In addition to sprays and wipes the following liquids are available:

- Lift Medical Adhesive Remover Solution 100ml (6.5 pence/ml)¹² - oil-based product applied directly to the skin or on a gauze swab.²⁵
- Zeflosil Cleaner and Remover 100ml (10 pence/ml).¹²

Savings

In England and Wales in excess of £18.2 million is spent annually on adhesive removers (ePACT September to November 2017). It seems likely that savings could be made by prescribing the most cost-effective, appropriate products and avoiding waste.

Annual savings by prescribing sprays that cost 15 pence/ml or less	£2.8 million
Annual savings by prescribing wipes that cost 31 pence/wipe or less	£716,000
Total annual saving	£3.5 million

Full data and supporting data pack available here: https://pdata.uk/views/B189_Stomaandcontinence-Adhesiveremovers/Bulletinmapped?%3Aiid=1&%3AisGuestRedirectFromVizportal=y&%3Aembed=y

Summary

Adhesive removers have a role in facilitating the removal of stoma appliances. Whether they are recommended routinely or based on individual circumstances, careful product selection is essential in optimising their use. Cost-effective, silicone-based products are preferred. They should be prescribed in a presentation and quantity appropriate to the individual.

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Additional PrescQIPP resources



Briefing



Audit, product tables

Available here: <https://www.prescqipp.info/b189-stoma-and-continence-adhesive-removers/category/436-continence-and-stoma-adhesive-removers>



Data pack

Available here: https://pdata.uk/#/views/B189_Stomaandcontinence-Adhesiveremovers/FrontPage?iid=1

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