PrescQIPP Community Interest Company

Support bandages and stockinette

Support bandages (e.g. crepe) are used in the prevention of oedema and in the management of mild sprains and strains.[1] Stockinette has a range of uses including managing skin conditions such as eczema (including wet and dry wrapping).[2] QIPP projects in this area are aimed at ensuring these products are prescribed and used appropriately. They should not be used where more suitable alternatives are available. This bulletin reviews the place in therapy of support bandages and stockinette. It offers guidance for organisations considering reviewing their prescribing.

Bulletins on a range of other wound care products including silver dressings, other antimicrobial dressings, sterile dressing packs, protease-matrix modulating dressings, foam dressings, soft polymer dressings and negative pressure wound therapy are also available at https://www.prescqipp.info/wound-care/projects/wound-care-webkit

Recommendations

- Support bandages should not be used in place of retention bandages for securing dressings, as retention bandages are more cost-effective.
- Elasticated tubular bandages (e.g. Tubigrip®, the most costly brand) have a limited role in chronic wound management. Use should generally be short term in the management of sprains and strains. Where they are indicated, consider prescribing a less-costly brand (see figure 1), or directing people to purchase them over-the-counter where appropriate.
- Elasticated viscose stockinette (e.g. Tubifast 2-way stretch®, the most costly brand) does not provide support and is generally used in managing skin conditions or for dressing retention. Reserve their use in dressing retention for areas that are difficult to dress with retention bandages (which are generally more cost effective), and consider prescribing a less-costly brand (see figure 2).
- Select the length of elasticated tubular bandage (0.5m or 1m) or elasticated viscose stockinette (1m, 3m, or 5m) that minimises wastage.
- Elasticated stockinette garments are also available for use in managing skin conditions or for dressing retention. They are a more costly option, so should be selected if other options are unsuitable or if they offer an advantage that would support concordance and treatment efficacy.
- When prescribing Skinnies® branded garments care should be taken not to select Skinnies WEB® products, unless they are for use in managing epidermolysis bullosa or burns.
- Do not use wet wrap therapy or dry bandages to treat infected eczema.
- Whole-body (limbs and trunk) wet wrap therapy and whole-body dry bandages (including tubular bandages and garments) should not be used as first-line treatment for atopic eczema in children. They should only be initiated by a healthcare professional trained in their use.
- Tubular bandages and stockinette (including garments) are generally washable and reusable. Consider including product specific washing, drying and reuse information on local formularies to encourage health professionals to give this advice when they are prescribed.
- Support bandages and stockinette are usually used as short term interventions, therefore should not be prescribed as repeats. This includes use as part of multi-layer compression bandaging.

- Consider the potential latex content of bandages and related items when prescribing for people who are allergic to latex.
- Prescribe the minimum quantity of dressings necessary to meet people's needs, to help minimise wastage and stockpiling.
- Involve appropriate stakeholders, such as tissue viability nurses and community nurses, in the formulary decision making process for their clinical expertise and to support whole system compliance.

Key action points

- Review all repeat prescribing of support bandages and stockinette. Prescribe them as acute issues unless there is a legitimate reason to continue repeat prescribing.
- Ensure GP practices have a process in place for identifying and investigating prescriptions for non-formulary support bandages or stockinette or large quantities of dressings.

The process of identifying potential issues and establishing the necessary information may require input from a range of staff such as GPs, receptionists, pharmacists, practice nurses and district nurses. Seek appropriate specialist advice e.g. from a tissue viability nurse, if needed.

Background

The roles of support bandages and stockinette are best considered alongside other types of bandages. Bandages used in wound care can be classified as follows:

Extensible bandages

This group can be further subdivided into

- Class 1, retention bandages - used to retain dressings in place.
- Class 2, support bandages - used to give support and prevent the formation of oedema in the management of mild sprains and strains. They are generally more costly than retention bandages.
- Class 3, compression bandages - used to apply pressure in the management of oedema or venous leg ulcers. They can be further subdivided by the degree of compression they provide (class 3A-3D, ranging from light to very high compression).[3]

It should be noted that compression therapy is not solely delivered by class 3 compression bandages. For example, 4 layer compression bandaging can include a layer of cotton crepe (a support bandage).[4]

Cohesive bandages

Cohesive bandages are a type of class 3 compression bandage which have the additional property of being able to adhere to themselves, but not to the skin. They are useful where ordinary stretch bandages might become displaced, and are used as an outer layer for multi-layer compression bandaging.[3] Care is needed in their application as the loss of ability for movement between turns of the bandage to equalise local areas of high tension carries the potential for creating a tourniquet effect.[1]

Medicated paste bandages

Medicated paste bandages consist of an open woven cotton fabric impregnated with a medicated paste or cream, usually zinc oxide. They are used with compression bandaging for venous leg ulcers where eczema and dermatitis are a problem, although they are associated with hypersensitivity reactions and should be used with caution.[3]

Tubular bandages and stockinette

These bandages are available as plain stockinette or lightweight elasticated versions.[3] The elasticated type can be further subdivided into:

- Elasticated tubular bandage BP – generally indicated for sprains, strains and areas of soft tissue injury.[2] Their use as the only means of applying pressure to an oedematous limb or to a venous ulcer is not appropriate, since the pressure they exert is inadequate.[1]

- Elasticated viscose stockinette (tubular and garments) – this type do not provide support and are used in the management of skin conditions such as eczema and dermatitis (including wet and dry wrapping) and for dressing retention.[2] As well as being available as a simple tube, elasticated viscose stockinette is also available as garments, e.g. body suits, vests, leggings and gloves, which come in a variety of sizes.
- Elasticated nylon/Elastane stockinette garments (Skinnies WEB® is the only brand available) – these specialist garments are intended for people with epidermolysis bullosa or burns. They aim to improve wound care and reduce the time spent on dressing change.[5]

Tubular bandages and stockinette are generally washable and reusable. The manufacturer's instructions regarding washing and drying differ – check individual products. A summary of washing and drying instructions for a number of products is also available as a support resource with this bulletin, https://www.prescqipp.info/resources/category/319-wound-care-support-bandages-and-stockinette Including information about washing, drying and reuse on local formularies could encourage prescribers to give this advice when they are prescribed. This could reduce over-prescribing and unnecessary expenditure on these products.

Some bandages and related items contain latex. Consider this when prescribing for people who are allergic to latex.

National guidance and clinical effectiveness

NICE recommend that dressing selection should be made after careful clinical assessment of the person's wound, their clinical condition, and their personal experience and preferences. In the absence of any robust clinical evidence to guide choice, NICE recommend that prescribers should routinely choose the dressing with the lowest acquisition cost and the performance characteristics appropriate for the wound and its stage of healing. They also recommend prescribing the minimum quantity sufficient to meet the person's needs, and avoiding routinely choosing antimicrobial dressings ahead of non-medicated dressings.[6]

NICE guidance on the management of atopic eczema in under 12 year olds discuss the use of bandages and medicated dressings including wet wrap therapy. The evidence base was found to be either lacking, or of poor quality with some conflicting results. However, the guideline development group did feel there was a role for these treatments in some cases, and made the following recommendations:

- Occlusive medicated dressings and dry bandages should not be used to treat infected atopic eczema in children (a NICE Do Not Do Recommendation).
- Localised medicated dressings or dry bandages can be used with emollients as a treatment for areas of chronic lichenified (localised skin thickening) atopic eczema in children.
- Localised medicated dressings or dry bandages with emollients and topical corticosteroids can be used for short-term treatment of flares (7 - 14 days) or areas of chronic lichenified atopic eczema in children.
- Whole-body (limbs and trunk) occlusive dressings (including wet wrap therapy) and whole-body dry bandages (including tubular bandages and garments) should not be used as first-line treatment for atopic eczema in children and should only be initiated by a healthcare professional trained in their use (a NICE Do Not Do Recommendation).
- Whole-body (limbs and trunk) occlusive dressings (including wet wrap therapy) with topical corticosteroids should only be used to treat atopic eczema in children for 7 - 14 days (or for longer with specialist dermatological advice), but can be continued with emollients alone until the atopic eczema is controlled.[7]

SIGN guidance on the management of chronic venous leg ulcers recommends that high compression multicomponent bandaging should be routinely used for the treatment of venous leg ulcers.[8] Multicomponent bandaging may include a layer of support bandage, such as cotton crepe.[4] Compression therapy improves healing rates for venous leg ulcers. High-compression multilayered therapy appears

to be more effective than medium or low compression, but there is uncertainty over which high-compression therapy is best. Compression bandages (and stockings) also reduce recurrence rates, but the overall evidence is limited.[9]

The Clinical Knowledge Summary (CKS) on sprains and injuries recommends a simple elastic bandage or elasticated tubular bandage, which should be snug, but not tight (and should be removed before going to sleep) as one of several measures for managing a sprain or strain. CKS state that crepe, cotton crepe, and cotton, polyamide, and elastane bandaging all provide support without exerting undue pressure. They note that elasticated tubular bandaging may be more convenient for people to use.[10]

Costs

Many localities have developed their own wound care product formularies to provide guidance on choice and use of wound care products. A best practice statement from Wounds UK advises that formularies should be developed by multidisciplinary teams using a fair and impartial process, avoiding the undue influence of the manufacturers. They should include a range of products to serve the range of wound types and stages of healing. In the absence of clinical and cost-effectiveness data to distinguish between dressings of similar type, and in the absence of other clinically important differences, cost is an appropriate deciding factor in dressing choice.[11]

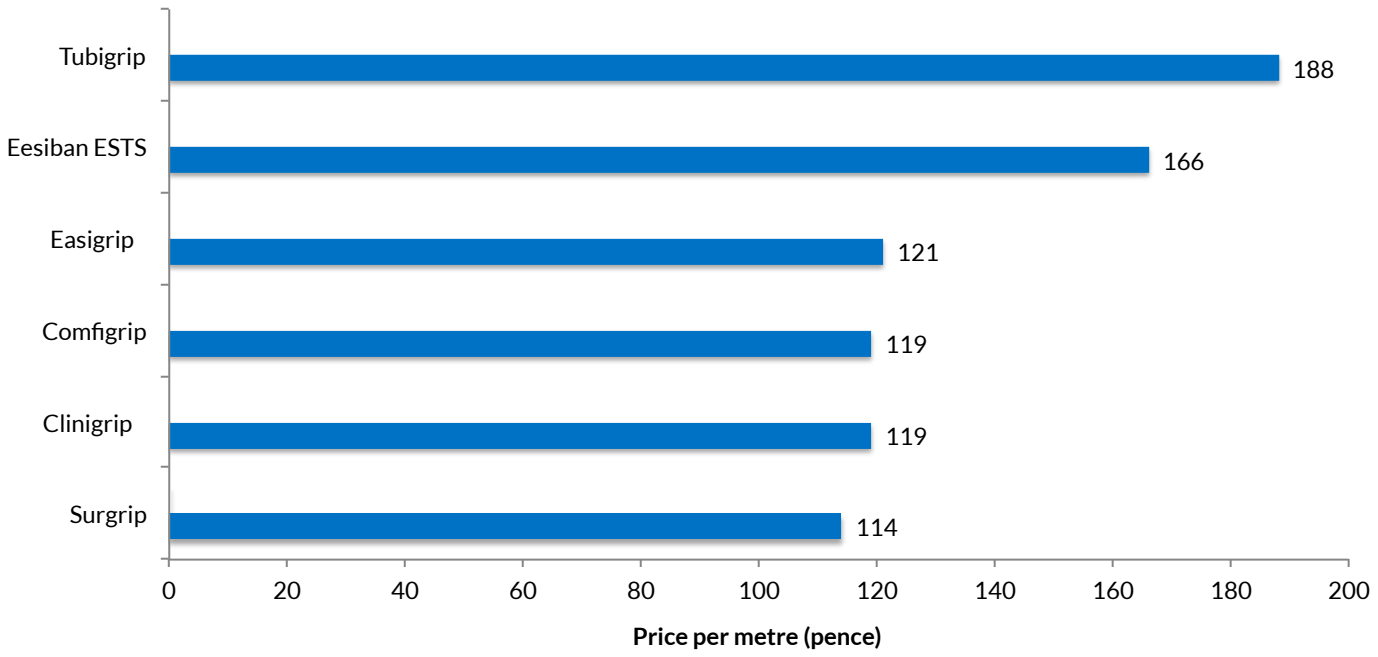
The following information can support formulary development and review by providing cost information for the different types of elasticated stockinette, and are intended for use in conjunction with the advice of a local specialist (e.g. tissue viability nurse). A number of widths and garments are available, so specific examples have been chosen for illustrative purposes. Prices for the wider range of products can be found in the Drug Tariff.

Support bandages

Support bandages such as crepe bandages are generally more costly than retention bandages, e.g. crepe bandage 7.5cm x 5m costs £1.38 compared with 26p for K-band 7cm x 4m (retention bandage).[12] Therefore unless support is needed, retention bandages are a more appropriate and cost effective way of securing dressings.

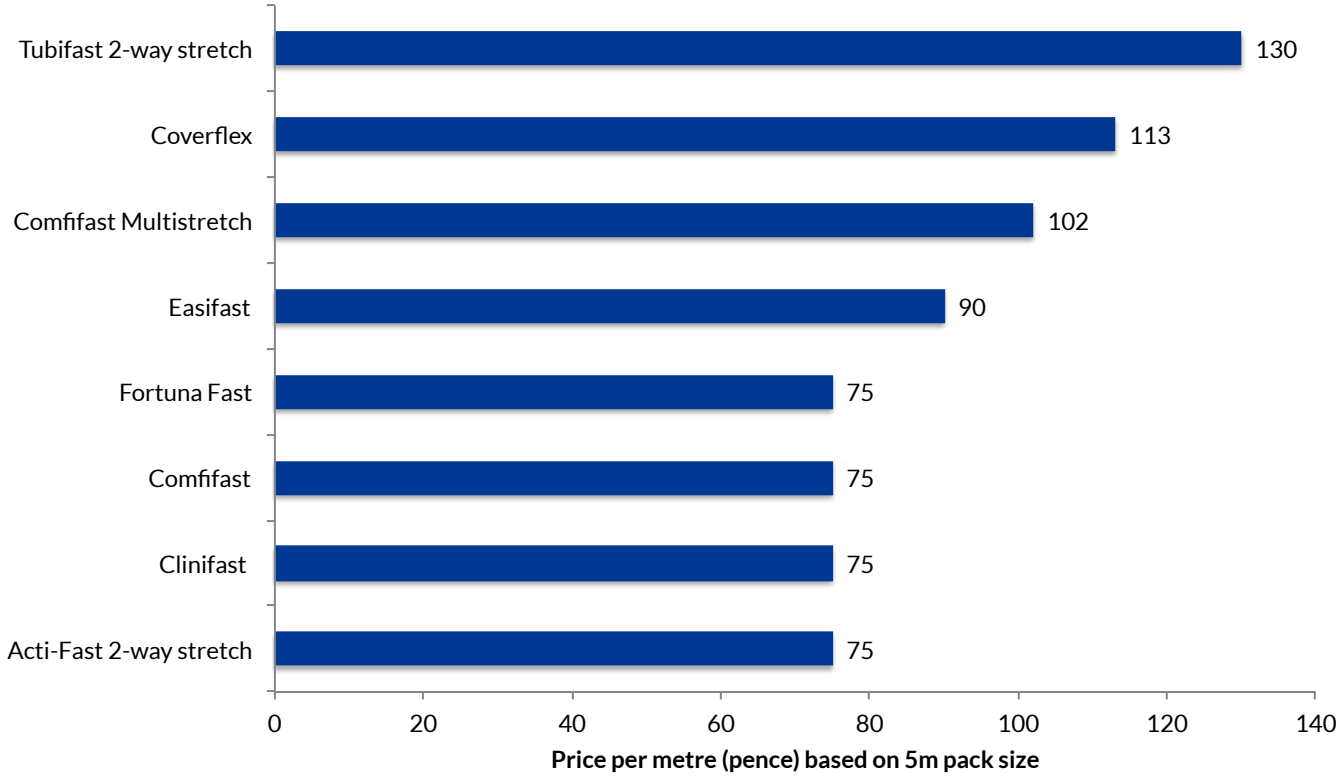
Elasticated tubular bandage

Figure 1. Cost comparison chart for elasticated tubular bandage BP, 7.5cm width (Drug Tariff January 2016)



Elasticated viscose stockinette (tubular)

Figure 2. Cost comparison chart for elasticated viscose stockinette, 7.5cm width (Drug Tariff January 2016)

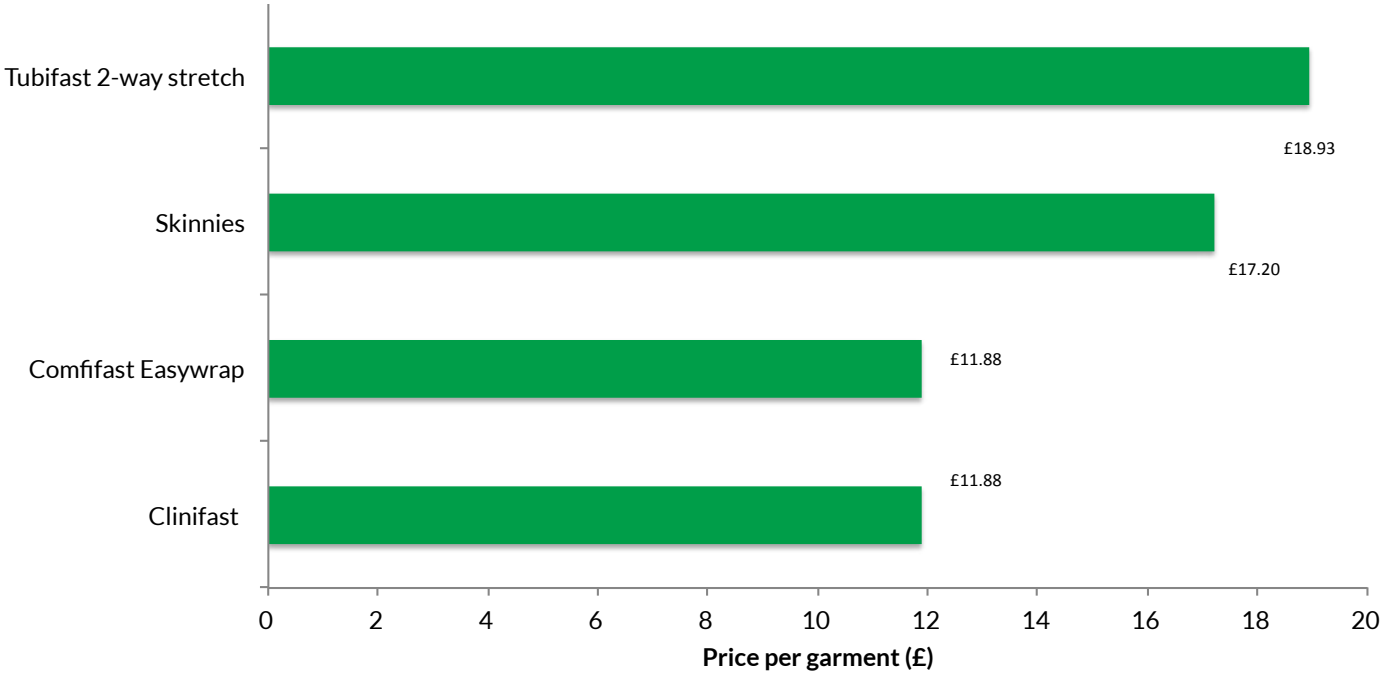


Retention bandages are generally a more cost effective way of securing dressings than using elasticated viscose stockinette; use of the latter should therefore be reserved for areas that are difficult to dress with retention bandages.

The price per metre of elasticated tubular bandage BP and elasticated viscose stockinette varies according to the length of that is chosen.[12] However, selecting the length that minimises wastage is a more important factor in making a cost effective choice.

Elasticated stockinette garments

Figure 3. Cost comparison chart for elasticated viscose stockinette – garments, long sleeved vest 11-14 years (Drug Tariff January 2016)



Elasticated viscose stockinette garments are a more costly option than the tubular version, so should be selected if other options are unsuitable or if they offer an advantage to the person that would support concordance and treatment efficacy.

Elasticated nylon/Elastane stockinette garments (Skinnies WEB®) are the most costly option e.g. a long sleeved round top for an 11-14 year old costs £85.[12] They are specialist garments intended for people with epidermolysis bullosa and burns,[5] and should not be used where less-costly alternatives are suitable.

Savings

In England and Wales, over £16.8 million is spent annually on support bandages and stockinette (ePACT January to March 2016). It seems likely that savings could be achieved by ensuring that support bandages and stockinette are prescribed appropriately, washed and reused correctly, and are not used when less costly alternatives are suitable.

Savings may also be achieved by selecting the least costly option that is suitable for the patient. Local wound formularies can support this.

Data on spend for bandages supplied through direct procurement are not readily available so cannot been included in the potential savings figures.

Table 1. Potential national cost savings for support bandages and stockinette supplied via FP10 (ePACT January to March 2016)

Annual savings for switching 25% of stockinette to light-weight conforming (retention) bandages	£2,246,461
Annual savings for switching 25% of support bandages to light-weight conforming (retention) bandages	£808,537
Annual saving for switching Tubigrip® and Tubifast 2-way stretch® (including garments*) to least costly alternative of same type	£1,091,944

*Gloves excluded as the cost variation differs.

Summary

Support bandages and stockinette are generally used as short term interventions for mild sprains and strains or in dermatological conditions (e.g. use of elasticated viscose stockinette for wet or dry wrapping in eczema). Optimisation of their usage should focus on choosing products with lower acquisition costs that are suitable for the individual and the intended use. They should be correctly washed and reused where this is appropriate. They should not be used where less-costly alternatives are suitable, such as retention bandages for securing dressings. As with all dressing prescribing, steps should be taken to prevent avoidable waste by ordering appropriate pack sizes and avoiding over-ordering and stockpiling.

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Additional PrescQIPP resources

Briefing Data pack Implementation resources

Available here: https://www.prescqipp.info/resources/category/319-wound-care-support-bandages-and-stockinette

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