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Lymphoedema compression garments (DROP-List)

Nationally £19.9 million is spent annually on the prescribing of lymphoedema compression garments (ePACT October to December 2018). These garments do have Dictionary of Medicines and Devices (dm+d) codes, but there are a wide range of products available, and GP prescribing systems do not recognise these codes so it can be difficult to identify the intended product. It is not possible to tell what proportion of this annual spend is due to the incorrect item being prescribed and dispensed leading to wastage and the need for another prescription. This bulletin provides the rationale for ensuring they are used as part of a local pathway that incorporates an ordering process which ensures the correct items are selected to avoid waste.

Recommendations

- Clinical Commissioning Groups (CCGs) should develop, implement and review local pathways for the use of lymphoedema compression garments.
- This pathway should be written and reviewed in conjunction and consultation with primary care, secondary care, if relevant tertiary care and all other relevant providers/stakeholders involved with the treatment of patients at risk of lymphoedema.
- The local pathway should include an agreed formulary which offers patients a choice of garments, but reduces the wide variety listed in the Drug Tariff. This prevents prescribing the wrong garment, reduces waste and prescribing costs.
- When recommending lymphoedema garments, lymphoedema specialists should ensure that the garment is a cost-effective choice and provide the GP with the code required for them to select the correct garment on the GP clinical system.
- Consider the use of order/prescription request forms which reflect the formulary and help ensure the correct item is selected.
- Lymphoedema compression garments should only be prescribed after a full assessment of the individual by an appropriately trained practitioner.
- All reasonable steps to ensure the correct items are ordered should be undertaken. If uncertain; confirm items with the lymphoedema service before they are ordered, to avoid wastage.
- Provide the patient with two of each garment one to wear and one to wash. Advise that garments should be washed frequently according to the manufacturer's instructions.
- The garments should be replaced every three to six months, or when they begin to lose elasticity.

Background

Lymphoedema is a chronic condition that causes swelling in the body's tissues. It can affect any part of the body, but usually occurs in the arms or legs. It develops when the lymphatic drainage system is unable to work effectively because it has become damaged, overloaded or its function is impaired. This results in a build-up of fluid and other substances, such as protein and waste products, in the tissues. A swelling will develop when the lymph vessels cannot keep up with the extra demands on their drainage capacity.[1] The swelling may come and go; it may get worse during the day and go down overnight. It can make it difficult to fit into clothes, jewellery and watches can feel tight. Other symptoms include:[2]

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- An aching, heavy feeling
- Difficulty with movement
- Repeated skin infections
- Hard, tight skin
- Skin folds developing
- Wart-like growths developing on the skin
- Fluid leaking through the skin

There are two main types of lymphoedema:[2]

Primary lymphoedema – caused by faulty genes that affect the development of the lymphatic system; it can develop at any age, but usually starts during infancy, adolescence, or early adulthood.

Secondary lymphoedema – caused by damage to the lymphatic system or problems with the movement and drainage of fluid in the lymphatic system; it can be the result of an infection, injury, cancer treatment, inflammation of the limb, or a lack of limb movement.

There is no cure for lymphoedema, but it is possible to control the symptoms using techniques to minimise fluid build-up and stimulate the flow of fluid through the lymphatic system.[2] The recommended treatment is Decongestive Lymphatic Therapy (DLT). DLT takes time and effort, but can be used to bring lymphoedema under control. There are four components:[3]

- Compression bandages and garments – to complement exercise by moving fluid out of the affected limb and minimise further build-up.
- Skin care – to keep the skin in good condition and reduce the chances of infection.
- Exercises – to use muscles in the affected limb to improve lymph drainage.
- Specialised massage techniques – known as Manual Lymphatic Drainage (MLD); this stimulates the flow of fluid in the lymphatic system and reduces swelling.

At first there is an intensive phase of therapy, during which the patient may receive daily treatment for several weeks to help reduce the volume of the affected body part. This is then followed by a second maintenance phase. During the maintenance phase the patient is encouraged to take over their care using simple self-massage techniques, wearing compression garments, and continuing to exercise.[3]

Lymphoedema compression garments are either flat-bed or circular knitted garments. Seamless, circular-knitted garments (in standard sizes) can be used to prevent swelling if the lymphoedema is well controlled and if the limb is in good shape and without skin folds. Flat-knitted garments (usually made-to-measure) with a seam, provide greater rigidity and stiffness to maintain reduction of lymphoedema following treatment with compression bandages.[4]

The compression values for lymphoedema garments are different to graduated compression hosiery. Compression hosiery values are based on British standard values, while lymphoedema garments compression values are based on the European classification:[4]

Class 1: 18–21 mmHg.

Class 2: 23–32 mmHg.

Class 3: 34–46 mmHg.

Class 4: 49–70 mmHg.

Class 4 super: 60–90 mmHg.

A standard range of light, medium, or high compression garments are available as well as low compression (12–16 mmHg) armsleeves, made-to-measure garments up to 90 mmHg, and accessories.[4] There are many different types of lymphoedema compression garments listed in part IXA of the Drug Tariff these include:[5]

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- Stockings
- Tights
- Toe caps
- Foot glove
- Armsleeves
- Combined Armsleeve – with hand piece, gauntlet, glove, mittens
- Gloves with and without fingers
- Gauntlets – wrist length, elbow length
- Pants – one legged, two legged, Capri, Bermuda

The garments have different variants, some examples include stockings which can be below knee, thigh length, open toe and closed toe. Gloves come with or without fingers and gauntlets can be wrist or elbow length. Additionally garments are available with optional extras which are priced separately. Some examples are: oblique toes, ankle pads, silicone bands, shoulder caps, zips, adjustable waistbands, silk pockets, fly openings and reinforced gussets.

National guidance

The National Institute of Health and Care Excellence (NICE) has not produced any individual technology appraisals for lymphoedema compression garments. However, their use is included in a number of NICE guidance documents, such as:

The NICE interventional procedures guidance, Liposuction for chronic lymphoedema (IPG588). This guidance advises that current evidence on the safety and efficacy of liposuction for chronic lymphoedema is adequate to support the use of this procedure. A few small incisions are made in the limb, into which cannulas, connected to a vacuum pump, are inserted and oedematous adipose tissue is removed by vacuum aspiration. Immediately after liposuction, a compression bandage is applied to the limb to control any bleeding and to prevent postoperative oedema and the limb is elevated during the hospital stay for three to seven days. From about two weeks after the procedure, a custom-made compression garment is worn. This garment is revised three or four times during the first year until the oedema volume has been reduced as much as possible and a steady state has been reached. In the case series of 146 patients treated by liposuction, 11% (16 of 146) of patients were able to completely eliminate the use of compression garment at one-year follow-up.[6]

NICE clinical guidance (CG81) Advanced breast cancer: diagnosis and treatment states that clinicians should consider using Multilayer Lymphoedema Bandaging (MLLB) for volume reduction as a first treatment option before compression hosiery. However, if patients develop lymphoedema as a complication they should be provided with at least two suitable compression garments. These should be of the appropriate class and size, and a choice of fabrics and colours should be available.[7]

Prescribing of lymphoedema compression garments in primary care

Lymphoedema compression garments are included in part IXA - appliances section of the Drug Tariff and therefore can be prescribed on a FP10 prescription.[5] There are a wide range of garments listed in the Drug Tariff which are available in different compressions and colours. Garments also have different features and optional extras which are available at additional costs.

The Dictionary of Medicines and Devices (dm+d) is a dictionary of descriptions and codes which represent medicines and devices in use across the NHS. This unique code can be used to identify precisely which product is required thus contributing to safe and effective use of medicines. The dm+d contains a huge variety of information, including:[8]

- Whether a product will be reimbursed by The NHS Business Services Authority (NHSBSA) if

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submitted for reimbursement by a dispensing contractor.

- The indicative price of each pack of a product (where a price is maintained by the NHSBSA).
- Current and discontinued products and packs available from manufacturers and suppliers.

Lymphoedema compression garments do have dm+d codes, but because there are a wide range of products available, and commonly used GP prescribing systems do not recognise these codes it can be difficult to identify the intended product. It is easy to pick the wrong product when prescribing and when dispensing lymphoedema compression garments leading to waste. The garments can be expensive so it is important that checks and processes are in place for ordering the correct item to prevent the wrong garment being prescribed.

CCGs should ascertain if there is a local lymphoedema service available. If no service is currently in place CCGs should develop, implement and review a local pathway for the use of lymphoedema compression garments. This pathway should be written and reviewed in conjunction and consultation with primary care clinicians, secondary care and if relevant, tertiary care providers. Other relevant stakeholders/providers involved with the treatment of patients at risk of lymphoedema include cancer services, vascular surgery units, wound care/tissue viability services, dermatology services, plastic surgery units and services where patients receive symptom management for advanced cancer.[9] These stakeholders should also be included in the consultation process. In CCGs with no lymphoedema service there tends to be an increased spends on cellulitis admissions, management of long term leaky legs, compression bandaging, inappropriate prescribing and use of elastic hosiery with poor compliance. This will also have an impact on community nurses by increasing the number of routine visits required for this group of patients.[10]

The pathway should include a local formulary of lymphoedema compression garments. The formulary will reflect local needs; reduce variation in prescribing, and the consideration of new garments that become available. The formulary should offer patients a choice of garments, but reduce the wide variety listed in the Drug Tariff. This will reduce the likelihood of prescribing and dispensing the wrong garment, reduce waste and therefore prescribing costs. Consider producing order/prescription request forms which reflect the formulary to ensure that requests for lymphoedema compression garments are for formulary items. Product codes and/or PIP codes should be added to both the formulary and order/prescription request forms to help identify the intended garment.

Lymphoedema compression garments should only be prescribed after a full assessment of the individual by an appropriately trained practitioner. If the patient presents to a primary care setting, the GP may choose to conduct some initial screening investigations to exclude other causes of swelling before referring the patient for confirmation of the diagnosis of lymphoedema. The choice of investigations used to elucidate the cause of the swelling will depend on the history, presentation and examination of the patient and include:[9]

- Blood tests:
  - Full blood count (FBC)
  - Urea and electrolytes (U&Es)
  - Thyroid function tests (TFTs)
  - Liver function tests (LFTs)
  - Plasma total protein and albumin
  - Fasting glucose
  - Erythrocyte sedimentation rate (ESR)/C-reactive protein (CRP)
  - B-natriuretic peptide
- Urine dipstick testing, including observation for chyluria
- Ultrasound
- Chest X-ray

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If the patient presents to secondary care or tertiary care, assessment maybe made by a medical specialist.

- Ultrasound – to assess tissue characteristics, e.g. for skin thickening and tissue fibrosis.
- Colour Doppler ultrasound – to exclude deep vein thrombosis and evaluate venous abnormalities.
- Lymphoscintigraphy – to identify lymphatic insufficiency in patients where the cause of the swelling is unclear, to differentiate lipoedema and lymphoedema and to evaluate potential candidates for surgery.
- Micro-lymphangiography using fluorescein labelled human albumin – to assess dermal lymph capillaries.
- Indirect lymphography using water soluble contrast media – to opacify initial lymphatics and peripheral lymphcollectors and to differentiate lipoedema and lymphoedema.
- CT/MRI scan – to detect thickening of the skin and the characteristic honeycomb pattern produced by lymphoedema, to detect lymphatic obstruction by a tumour at the root of a limb or in the pelvis or abdomen, and to differentiate lipoedema and lymphoedema.
- Bioimpedance – to detect oedema and monitor the outcome of treatment.
- Filarial antigen card test – to detect infection with Wuchereria bancrofti by testing for antibodies to the parasite in a person who has visited or is living in a lymphatic filariasis endemic area.

The choice of compression garment should take into account factors such as the stage and severity of the lymphoedema, the patient's comfort, preferences, lifestyle, psychosocial status, concurrent disease, and ability to apply and remove garments. The local pathway should contain details of who will provide the patient with their initial supply of compression garment after assessment. Details on the prescription should include:[9]

- Quantity of garments (at least two – one for wearing, one for washing)
- Manufacturer, style and garment code
- Level of compression required
- Knitted texture, i.e. circular knit or flat knit
- Length
- Fixation and attachment, if needed, e.g. silicone top, waist attachment
- For ready to wear garments, state size
- For custom made garments, provide measurements required by the manufacturer
- Sex of the patient
- Colour

Care must be taken when ordering lymphoedema compression garments to ensure that the correct item is selected. The formulary and order/prescription request forms can help with this process. Where there is uncertainty, confirm items with the lymphoedema service before they are ordered, to avoid wastage. In Wales the national lymphoedema service development programme carried out an audit which highlighted that 50% of compression garment prescriptions were being dispensed incorrectly. Some of the garments issued caused harm - for example a made-to-measure garment was ordered and a ready-to-wear garment was issued, which was four times too small for the patient.[11]

The patient should be provided with two of each garment one to wear, one to wash. The garments should be washed frequently according to the manufacturer's instructions. They should be replaced every three to six months, or when they begin to lose elasticity.[9]

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Costs and savings

Approximately £19.9 million is spent annually in England and Wales on the prescribing of lymphoedema compression garments (ePACT October to December 2018). It is not possible to tell what proportion of this annual spend is due to the incorrect item being ordered leading to wastage and the need for another prescription. If waste can be reduced this will lead to a reduction in costs. **A 20% reduction in prescribing (by reducing wastage) would produce savings in the order of over £3.9 million annually.** Savings made by reducing product selection errors and using cost-effective choices could be used to support the local lymphoedema service.

Summary

- Lymphoedema compression garments do have dm+d codes. However, as there are a wide range of products listed in the Drug Tariff available to prescribe on FP10 in primary care, it can be difficult to identify the intended product on GPs prescribing systems. The garments can be expensive so it is important that processes are in place for ordering the correct item to prevent the wrong garment being prescribed leading to waste and increased prescribing costs.
- CCGs should ascertain if there is a local lymphoedema service available. A local pathway should be in place for the use of lymphoedema compression garments which includes a local formulary. This should be produced in conjunction with primary care, secondary care, if relevant, tertiary care and all other relevant providers/stakeholders. Order/prescription request forms which reflect the formulary should be used to ensure the correct item is selected. Savings made by reducing product selection errors and using cost-effective choices could be used to support the local lymphoedema service. If there are any uncertainties confirm items with the lymphoedema service before they are ordered. Lymphoedema compression garments should only be prescribed after a full assessment of the individual by an appropriately trained practitioner.

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Further reading

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Additional resources

Briefing

Example order form

Available here: https://www.prescqipp.info/our-resources/bulletins/bulletin-192-lymphoedema-compression-garments-drop-list-20/

Data pack

Available here: https://pdata.uk/#/views/B192_LymphoedemagarmentsDROP-List/FrontPage?:iid=2

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