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Pressure ulcers – prevention and treatment

Understanding NICE guidance – information for people with pressure ulcers (also known as pressure sores or bed sores) and those at risk of developing pressure ulcers, their families and carers, and the public

Information about
NICE Clinical Guideline 29

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Ordering information

You can download the following documents from www.nice.org.uk/CG029

- This booklet.
- A quick reference guide, which has been distributed to healthcare professionals working in the NHS in England.
- The full guideline – all the recommendations, details of how they were developed, and summaries of the evidence on which they were based.

For printed copies of the quick reference guide or information for the public, phone the NHS Response Line on 0870 1555 455 and quote:

- N0912 (quick reference guide)
- N0913 (information for the public).

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About this information

This information describes the guidance that the National Institute for Health and Clinical Excellence (called NICE for short) has issued to the NHS on pressure ulcers. It is based on 'The prevention and treatment of pressure ulcers' (NICE Quick reference guide No. 29), which is a clinical guideline produced by NICE for doctors, nurses and others working in the NHS in England and Wales.

Clinical guidelines

Clinical guidelines are recommendations for good practice. The recommendations in NICE guidelines are prepared by groups of healthcare professionals, people representing the views of those who have or care for someone with the condition, and scientists. The groups look at the evidence available on the best way of treating or managing the condition and make recommendations based on this evidence.

What the recommendations cover

NICE clinical guidelines can look at different areas of diagnosis, treatment, care, self-help or a combination of these. The areas that a guideline covers depend on the topic. They are laid out in a document called the scope at the start of guideline development.

This booklet tells you about the NICE guideline on the prevention and treatment of pressure ulcers. It doesn't attempt to explain pressure ulcers or their treatment in detail. For suggestions of starting points to find out more, see page 18.

If you have questions about the specific treatments and options covered, ask your healthcare professional.

How guidelines are used in the NHS

In general, healthcare professionals in the NHS are expected to follow NICE's clinical guidelines. But there will be times when the recommendations won't be suitable for someone because of his or her specific medical condition, general health, wishes or a combination of these. If you think that the treatment or care you receive does not match the treatment or care described on the pages that follow, you should talk to your doctor, nurse or other healthcare professional involved in your treatment.

You have the right to be fully informed and to share in making decisions about your healthcare, and the care you receive should take account of your individual needs.

Explanation of terms

Healthcare professional – in this booklet we use the term healthcare professional to mean anyone working as part of your healthcare team. For example, this could be your doctor, nurse, physiotherapist or occupational therapist.

Carer – people may be cared for by a relative or a friend when they are ill, while others may have paid care workers or nurses to look after them. In this booklet, the word carer means unpaid carers such as friends or relatives, not paid care workers.

Pressure ulcers – pressure ulcers may also be called bed sores or pressure sores. Your healthcare professional may also describe them as decubitus ulcers.

Your role in treatment

NICE recommends that healthcare professionals work together with patients so that patients can play an active part in making decisions about their care. The treatment offered should take into account each patient's individual needs and preferences.

This means you should be given information that you can understand so you can talk about your choices for treatment with your healthcare team. If you wish, your carers should also be involved in helping you make decisions about your treatment.

Your healthcare team should respect and take into account your knowledge and experience, especially if you have been vulnerable to pressure ulcers for a long time.

If you have a pressure ulcer or are at risk of developing one, you and your carer should also be given information or training on:

- why you may be vulnerable to pressure ulcers
- areas of your skin that are vulnerable to pressure damage
- how to inspect your skin and recognise skin changes
- how you can relieve or reduce pressure
- treatment and care of pressure ulcers
- where you can find more advice and help.

What is a pressure ulcer?

A pressure ulcer is damage that occurs on the skin and underlying tissue. Pressure ulcers are caused by three main things:

- pressure – the weight of the body pressing down on the skin
- shear – the layers of the skin are forced to slide over one another or over deeper tissues, for example when you slide down, or are pulled up, a bed or chair or when you are transferring to and from your wheelchair
- friction – rubbing the skin.

The first sign that a pressure ulcer may be forming is usually discoloured skin, which may get progressively worse and eventually lead to an open wound. The most common places for pressure ulcers to occur are over bony prominences (bones close to the skin) like the bottom, heel, hip, elbow, ankle, shoulder, back and the back of the head.

NICE has made recommendations to the NHS on the prevention and treatment of pressure ulcers.

Who gets pressure ulcers?

Anyone can get a pressure ulcer, but some people are more likely to develop one than others. People with a pressure ulcer are also at risk of developing another pressure ulcer. NICE has made recommendations that help healthcare professionals work with you to prevent pressure ulcers.

People may be at risk of getting a pressure ulcer if, for example, they:

- have problems moving and cannot change position by themselves without help
- cannot feel pain over part or all of their body
- are incontinent
- are seriously ill or undergoing surgery
- have had pressure ulcers in the past
- have a poor diet and don't drink enough water
- are very old or very young
- have damaged their spinal cord and can neither move nor feel their bottom and legs
- are older people who are ill or have suffered an injury, for example a broken hip.

Your healthcare professional should assess whether you are at risk of developing a pressure ulcer. This will involve your healthcare professional examining you and asking you some questions. NICE recommends that this assessment is carried out when you first come into contact with your healthcare professional, and on a continuing basis after that. If you are in hospital your assessment should be carried out within 6 hours of your stay. If you are considered not to be at risk, you should be reassessed if there is a change in your condition.

Preventing pressure ulcers

Pressure ulcers can develop very quickly in some people if the person is unable to move for even a very short time – sometimes within an hour. Without care, pressure ulcers can be very serious. They can damage not just the skin, but also deeper layers of tissue under the skin. Pressure ulcers may cause pain, or mean a longer stay in hospital. Severe pressure ulcers can destroy the muscle or bone underneath the skin, so they can take a very long time to heal. In extreme cases, pressure ulcers can become life threatening, as they can become infected, and sometimes cause blood poisoning or bone infections.

Keeping moving

One of the best ways of preventing a pressure ulcer is to reduce or relieve pressure on areas that are vulnerable to pressure ulcers (for example, bony parts of the body). This is done by moving around and changing position as much as possible. If you already have a pressure ulcer, lying or sitting on the ulcer should be avoided as it will make the ulcer worse.

Your healthcare professional should advise you and your carer on how pressure is best reduced or relieved on areas of skin that are vulnerable to pressure ulcers. This advice should include:

- correct sitting and lying positions
- how to adjust your sitting and lying position
- how often you need to move or be moved
- supporting your feet
- keeping good posture
- which equipment you should use and how to use it.

If you have a pressure ulcer you should change your position or be repositioned regularly to allow the ulcer to heal and avoid further damage. This applies whether you are in bed, chair or wheelchair.

If you have, or are at risk of developing, a pressure ulcer, your healthcare professional should work with you to find ways to help you move around and change position. The method chosen should be based on your needs and be acceptable to you. If you are being cared for at home, your carer's needs should also be taken into account.

Your healthcare professional should monitor your movement. This will involve him or her drawing up a repositioning timetable in agreement with you and recording your changes in position. Your healthcare professional should consider whether your sitting time should be restricted to less than 2 hours.

Mattresses and cushions

There are many different types of mattress and cushion that can help reduce the pressure on bony parts of the body and help prevent pressure ulcers. Your healthcare professional should work with you to decide which types of pressure-relieving supports are best for you.

You, your carer and your healthcare team should consider all of the surfaces that you come into contact with. Your healthcare professional should re-examine you regularly and talk to you and your carer to find out whether your needs have changed and whether another type of support would work better. Your healthcare team should be able to access different types of mattress and cushion during the day and night.

If you are at risk or have a grade 1 or 2 pressure ulcer the minimum provision you should receive is a high specification foam mattress (for more information on grading pressure ulcers see page 13). This type of mattress moulds or contours the body, helping to relieve pressure and stop ulcers from developing. If you have a grade 3 or 4 pressure ulcer you should receive a more sophisticated mattress or overlay, for example a continuous low pressure system or an alternating pressure system.

Young children who have pressure ulcers will need to be assessed especially carefully to determine which types of support will help them. This is because most supports are designed for adults so these supports may be less comfortable for children or may not work as well for them.

Skin assessment

Your skin should be assessed regularly to check for signs of pressure ulcer development. How often your skin is checked depends on your level of risk and your general health.

Your healthcare professional will be looking for:

- red patches of skin on light skinned people that don't go away
- bluish/purplish patches on dark skinned people that don't go away
- blisters, or damage to the skin
- patches of hot skin
- swelling
- patches of hard skin
- patches of cool skin.

Self care

It is important to move and change position yourself as often as you can. Your healthcare professional should offer to teach you and your carer how to redistribute your weight. People with limited movement may need to have their limbs moved by someone else.

You, or your carer, should be encouraged to inspect your own skin to check for signs of pressure ulcers – you may need to use a mirror to see awkward areas such as your bottom or heels.

If you or your carer notice possible signs of damage you should tell someone in your healthcare team immediately – one of the nurses if you are in hospital or a care home, or your community nurse or GP if you are at home.

A good diet

Eating well and drinking enough water is very important. It is particularly important for people at risk of developing a pressure ulcer or those with a pressure ulcer as their condition can get worse or fail to get better without it. Your healthcare professional should discuss your diet with you and any possible improvements that could be made. If you are found to be lacking in particular nutrients you may need to take supplements. Your healthcare professional may refer you to a dietitian for specialist advice.

The type of dietary help offered by your healthcare team will depend on what's missing from your diet, your general health, your preferences and expert opinion.

Assessing pressure ulcers

If you have a pressure ulcer it should be examined by a registered healthcare professional as soon as possible after it appears and then again at regular intervals. He or she should talk to you to try and understand what caused it and write this in your notes. They should also record where it is, its size and what it looks like. They may use photographs or tracings to do this.

Your healthcare professional will also grade your pressure ulcer according to how deep it is. The grading that NICE recommends ranges from grade 1 – for an area of discolouration, swelling or heat that won't go away – to grade 4 – a deep wound that may go down to bone.

Your healthcare professional will also check for signs of infection, such as discolouration, swelling, heat and odour, and find out how much pain the ulcer is causing.

All of this information will enable the healthcare professional to work with you to choose the best treatment for your pressure ulcer.

Treating pressure ulcers

Your healthcare professional should look at your pressure ulcer regularly, at least once a week, and check for any changes. To relieve the pressure on the ulcer, your healthcare professional should work with you to find the best ways of moving around, changing position and using supports, such as a special mattress or cushion (for more on this see pages 10 to 11).

The decision about which type of support to use should be based on a number of factors including:

- how severe your pressure ulcer is
- where the pressure ulcer is on your body
- your general health
- how comfortable the support is for you
- whether you can change position on your own or whether there is someone who can help you change position.

Your pressure ulcer may need other treatments to help it heal. Treatments include dressings, removing damaged skin and other methods of promoting healing. A trained healthcare professional will work with you to decide the best treatment for your pressure ulcer.

If you have signs of an infection, your healthcare professional may treat it with antibiotics or special dressings that kill bacteria and help the wound get better quicker.

Dressings

Your pressure ulcer may need a dressing. To help it heal as quickly as possible, NICE recommends the use of modern dressings. Some examples of these dressings are listed below.

- Hydrocolloids – an adhesive dressing that gels over the wound but sticks to the surrounding skin.
- Hydrogels – a simple gel that keeps wounds moist and can help clean wounds.
- Foams – available in different shapes and sizes, foams are designed to absorb and retain fluid.

These modern dressings should be used in preference to basic dressings such as gauze, paraffin gauze and simple dressing pads.

Sometimes other treatments may be needed. These treatments include electrical stimulation, which uses electrical currents to promote healing, and negative pressure therapy, where suction is applied to the wound.

Removing damaged skin

In some cases it may be necessary to remove dead tissue from the ulcer to encourage it to heal. This type of treatment is called debridement. It can be done with dressings or it may involve cutting away areas of dead tissue. This can often be done at home or in a GP's surgery, but if the ulcer is very deep or has a lot of dead tissue in it, an operation in hospital to clean out the wound may be needed.

Being referred to a surgeon

Sometimes, even with the best treatment, pressure ulcers may not heal. If your pressure ulcer does not heal properly you may be advised to have surgery to help close the wound. Your comfort and preferences should be taken into account.

Where you can find more information

If you need further information about any aspects of pressure ulcer prevention and treatment or the care that you are receiving, ask your doctor, nurse or other member of your healthcare team.

If you want to read the other versions of this guideline

There are three versions of this guideline:

- this one
- the quick reference guide, which is a summary of the recommendations for healthcare professionals
- the full guideline, which contains all the recommendations on the management of pressure ulcers, details of how they were developed, and summaries of the evidence on which they were based.

This booklet also draws on recommendations made in 'Pressure ulcer prevention: pressure ulcer risk assessment and prevention, including the use of pressure-relieving devices (beds, mattresses and overlays) for the prevention of pressure ulcers in primary and secondary care' and 'Pressure ulcer risk assessment and prevention'.

All versions of the guideline are available from the NICE website (www.nice.org.uk/CG029). Printed copies of this booklet and the quick reference guide are also available. Phone the NHS Response Line on 0870 1555 455 and quote N0912 (quick reference guide) or N0913 (information for the public).

If you want more information about pressure ulcers

NHS Direct may be a good starting point for finding out more about pressure ulcers. You can call NHS Direct on 0845 46 47 or visit the website (www.nhsdirect.nhs.uk).

There may be support groups in your area for people with disabilities, older people, and certain types of illnesses that are associated with pressure ulcers. Your doctor or nurse should be able to give you more details.

If you want to know more about NICE

There is more about NICE and the way that the NICE guidelines are developed on the NICE website (www.nice.org.uk). You can download the booklet 'The guideline development process – an overview for stakeholders, the public and the NHS' from the website, or you can order a copy by phoning the NHS Response Line on 0870 1555 455 (quote reference number N0472).

At the NICE website you can also find information for the public about other guidance that may be relevant for people with pressure ulcers:

- *Infection control: prevention of healthcare-associated infection in primary and secondary care*. NICE Clinical Guideline No. 2 (2003). Available from: www.nice.org.uk/CG002publicinfo

It can also be ordered from the NHS Response Line on 0870 1555 455; quote N0219.

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