Skin Care after your Spinal Cord Injury

Pressure Area Care
Pressure area care means looking after your skin to prevent it from breaking down (also known as pressure ulcer or pressure sore).

What is a pressure sore?
A pressure sore is an area of damaged skin and flesh. It usually starts with the skin changing colour e.g. redder or darker than usual. If left untreated a blister or open wound can develop. Over a period of time this will result in a deep hole in the skin and underlying tissues.

It is better to prevent them as they can take a long time to heal. If they are left untreated complications may occur which could be fatal.

What areas are at risk?
Everywhere is at risk but particularly skin areas over bony prominences, e.g. hips, knees, elbows, lower back, buttocks etc. (See diagram on next page).
1. Hips
2. Trochanters
3. Front and inner sides of knees
4. Shins
5. Ankles
6. Toes
7. Back of head
8. Shoulder blades
9. Elbows
10. Sacrum
11. Buttocks
12. Ankles
13. Heels
What causes pressure sores and how can I prevent them?
Below is a list of things that can cause pressure sores:

Pressure
Pressure on the skin means blood cannot get to it. When you take away the pressure the skin becomes pink from the blood supply returning to the tissues. Usually skin colour returns to normal after 15-20 minutes. If skin colour does not return to normal after this time damage has been done to the underlying tissues.
If possible try to take the weight off any vulnerable area every 15 minutes or so by changing position e.g. turning onto other side when in bed, lifting up when sitting in a chair.

Shearing
This is the sliding of skin over bone e.g. sliding down the bed, dragging your bottom against the wheel when transferring. Think about your transfer technique and discuss with your physiotherapist any alternatives or aids to assist if needed.

Friction
This is rubbing of one surface against another e.g. ankles or knees rubbing together.
Consider using pillows when in bed to separate your legs and prevent them rubbing together.

Excess Moisture
The most likely causes are sweat, urine or faeces. All of these are waste products which have harmful toxins that work like acids when in contact with the skin.
Wash your skin thoroughly and keep it dry. Avoid using talcum powder which clogs up the skin.
Anaemia
This means there are fewer red blood cells to carry oxygen to the tissues. Eat a healthy diet rich in iron (e.g. spinach, broccoli, breakfast cereals or nuts). Your doctor may prescribe iron tablets depending how severe the anaemia is.

Underweight or overweight
Underweight people have less padding around the bony parts and overweight people have excess pressure around the bony parts. Eat a healthy diet and drink plenty of water. We recommend you drink 2 litres each day unless your doctor tells you otherwise.

Steroids
Long term use of steroid makes the skin thin.

Infection
Infection often causes an increase in temperature and sweating therefore, increasing moisture. Check your skin more often when you have an infection. You may need to increase how often you turn or reduce the time sitting in your chair if you have an infection.

Nutrition
Your diet can affect the healing process. Protein promotes wound healing (e.g. red meat, milk, eggs.) Vitamin C (e.g. oranges, tomatoes) promotes skin’s elasticity or suppleness. Make sure you include these in your diet.

Smoking
Smoking narrows blood vessels, which reduces the circulation to the skin making the skin more at risk. There is also the risk of burns from hot ash (see section on heat or cold).
Wheelchair, cushions, shower chair or commode

Your wheelchair cushion gives you postural support and weight distribution and therefore skin protection. However, sitting the wrong way can cause pressure sores. The areas at risk are sitting bones, base of spine, the back of heels and palms of hands.

To reduce the risk of skin breakdown:

- Relieve pressure at least once every 15 minutes.
- Avoid, knocking toes, feet and ankles during transfer.
- Use an appropriate cushion.
- Make sure the cushion is placed the right way round.
- Make sure the Roho cushion, if used, is set at the right pressure.
- Make sure your wheelchair is set up correctly.
- Make sure all bolts and screw heads are covered.
- Contact your local appliance department if you develop problems with your wheelchair or cushion.
- Use padded shower chairs.

Heat or Cold

Your spinal cord injury can affect your awareness of temperature sensation. This means that you are more at risk to heat and cold damage below your level of injury. Often the paralysed body takes on the environmental temperature (called poikilothermia) due to an inability to shiver or sweat normally.

To reduce the risk of skin breakdown:

Check water temperature.

- Do not rest hot drinks or food on your chest or knees.
- If hot drinks are spilt on you, check the area for scalding.
- Do not use a hot water bottle or electric blanket.
- Keep a safe distance from fires, radiators and hot water pipes.
- Dress appropriately for the temperature of your environment.
• In warm weather use a high factor sun cream and do not stay out in the sun too long.
• If you are lying on a sun lounger place your wheelchair in the shade as the metal frame can get very hot.
• Try to give up smoking to reduce the risk of you burning yourself with ash.

Clothing
Many items of clothing and accessories can increase pressure on your skin.
To reduce the risk of skin breakdown:
  • Trousers and Denims
    » Should be looser at the waist, hip and crotch areas
    » Avoid thick seams, buttons, pockets, remove studs
    » Avoid putting keys or loose change in pockets or holding them between your legs
  • Skirts
    » Should be looser at the waist
    » Avoid skirts with buttons or zips at the back
  • Shoes
    » Should be one size larger than normal to allow for swelling
    » Should not be tied too tightly
    » Check feet extra carefully when wearing new shoes
  • Underwear
    » Ideally do not wear underpants
    » If worn should be seamless and well fitted
    » Avoid nylon underwear as it increases sweating
  • Socks
    » If seams are thick wear inside out
• Accessories
  » Be careful with belts and buckles
  » Make sure anyone washing or turning you does not wear jewellery, watches, rings and bracelets as they can scratch your skin

Overall you have to actively look after your skin. You have to prevent and predict skin damage before it occurs. Always check your skin when you change position or change from one surface to another. Use a long handled mirror for areas you cannot see. If you cannot check your own skin make sure whoever is assisting you checks it and tells you what they see. Increased spasm or excessive sweating may be a sign of damaged skin. Good posture is important. Slouching can lead to skin over the tail bone breaking down.

If your skin is damaged e.g. redness, swelling, bruising, blistering or broken, it’s important that you relieve pressure to the area. This may mean staying in bed to allow complete pressure relief. Pressure sores can take a short time to form and a long time to heal. The good news is you can prevent pressure sores if you find them quickly and take immediate action. Unfortunately if you ignore them, then they can be life threatening.

**Skin Tolerance**

Skin tolerance is the length of time a person can lie or sit on one area without getting a red mark. Everyone’s skin tolerance is different.

It is important to know what your skin tolerance is. If lying or sitting on a different surface than usual your skin tolerance time may be different so if you are trying a new surface for the first time, check your skin on a regular basis.
How often should the skin be checked?
Whilst in hospital we will check your skin, or encourage you to check your own skin every time you get up or return to bed. This is to establish what your skin tolerance is. By the time you go home you should know what your skin tolerance is. Routinely you should check your skin twice a day. Once before getting up in the morning and going to bed at night. However, if you have any skin problems you need to check your skin more often.

How to position yourself in bed
If your skin tolerance is 8 hours that means you should turn every 8 hours. If it is 6 hours then you should turn every 6 hours etc.

When lying on your back the risk areas are:

- Heels
- Sacrum and coccyx
- Elbow
- Scapulae
- Occipital area

Placing pillows under risk areas can help in relieving pressure.

When lying on your side the risk areas are:

- Between ankles
- Between knees
- Outer aspects of ankles
- Outer aspects of knees
- Greater trochanters
- Ears
- Shoulders

Placing pillows at risk areas can help in relieving pressure.

When lying face down the risk areas are:

- Upper aspects of feet
- Patella
- Male genital area
- Iliac crests
- Chin
- Forehead
- Shoulders

Information after a Spinal Cord Injury
Using pillows at risk areas can help in relieving pressure. Lying face down is also good for straightening your hips and knees and can reduce leg spasms.

**Pressure relieving in your wheelchair**

When sitting in your chair, it is important that you pressure relieve regularly. You can do this in a number of ways.

Lifting buttocks from chair
In order to do this you need to have good arm strength. Apply brakes and push up either from the armrests or wheels until your buttocks are free of the chair.
Count to 20 slowly and then come back down again.
Do this every 15 minutes.
Leaning from side to side
If you do not have good arm strength then going from side to side is an alternative. Apply brakes, hook your arm around back of chair and then lean to opposite side that takes the pressure off that side of the buttock.
Count to 20 slowly and repeat on the other side.
Tilting forward
This is another effective method but again you need good arm and balance control unless there is someone to help you. Apply brakes; bend forward moving your chest towards your knees, balancing by leaning your arms on your upper thighs or wheelchair. This lifts the weight of the buttocks off the chair seat.

Bed Rest
If a red mark develops over your hips, buttocks, or lower back, stay off the area. This means staying in bed. Do not overcompensate by overworking one side to relieve the other or you will end up with marks on both sides. Once the mark has faded then increase the time lying on that side gradually i.e. by 30 minutes. Do not continue to increase time if skin gets marked.

For pressure relieving purposes, place pillows over the bony prominences i.e. under ankles, between legs. Do not place legs directly on top of one another. Take care when placing pillows between thighs to avoid pressure or sweating on the groin and genitalia and also at the back to avoid pressure or sweating on the sacrum or buttocks. When using a pressure relieving mattress e.g. air mattress, you do not need pillows underneath your ankles.
What do I do when skin has healed?
If there has been a skin problem requiring a period of rest in bed then once it has completely healed, gradually get up.
If in any doubt please contact a member of your Spinal Unit Team.

Always Remember
1. Check your body every morning and every night! Use a mirror for areas that can’t be seen.
2. Take action immediately! The moment you detect a red mark or even suspect a pressure area is forming you must go on bed rest and remain there until your skin is completely healed.
3. Always get advice from the liaison team or your district nurse.

Skin
I have been very lucky and have had no skin problems either in hospital or since discharge but I am aware of the problems that may occur and take care of my skin in order to avoid them.