Examples of Skin Traction

Traction is a directional pull on the trunk or on an extremity. The aim is to immobilise and reduce fractures, correct deformities, and for elevation of extremities for the management of soft tissue injuries. This is also effective pain relief.

This is accomplished by attaching immobilising devices either to the skin or to the skeleton. This it is called skin traction and skeletal traction.

Skin Traction

Skin traction is used in the treatment of conditions for which only a small amount of pull is required. It can be used for

- Immobilisation of extremities after surgical internal fixation of fractures
- For the relief of muscle spasm in low back pain rarely used in recent times.
- For immobilisation of infected joints.
- For pain relief in Fractured neck of Femurs

There are two kinds of skin tractions

- Adhesive
- Non-adhesive

The weights typically weigh five to seven pounds and attach to the skin using tape or straps. They bring together the fractured ends of bone or dislocated joint so that it may heal correctly.

Complications of Skin Traction

Complications can result due to tight wrapping or excessive weight leading to pressure sores developing. Bony prominences are especially vulnerable. The following complications can be associated with skin traction

- Skin Injury
  - Can vary from abrasions to partial-thickness skin loss.
• Nursing staff may tilt you on your side to prevent pressure sores.

• **Nerve injury**
  • Can occur, symptoms can include pain, loss of sensation, and loss of function, these are early signs of injury

• **Compartment Syndrome**
  • is a severe complication, caused by a deprivation of the blood supply to muscles due to a raised pressure within the compartment of a limb. Contributing factors may be as a result of the following, a direct soft tissue injury, a Vascular injury or Inadequate Immobilisation

  • A surgical procedure called a Fasciotomy may be indicated to relieve the pressure, if the pressure is not relieved; the compartments in the limb may be opened to release pressure.

In order to prevent complications nursing staff will regularly inspect your skin. Any rash, abrasion, or an open wound is a contraindication to skin traction and will be treated appropriately.

### Nursing staff when caring for traction will:

- Clean your skin thoroughly
- The elastic bandages will be wrapped gently
- The bandages should be **rewrapped daily**.
- The skin will be observed daily for signs of skin breakdown.
- Please report any tingling, numbness or loss of sensation to the nursing staff.
- Please ask the nursing staff to help you sit upright in bed for meals to avoid choking.
Application of skin traction

Skeletal traction

Require pins, screws, or wires to be inserted into the bone, under anaesthetic which allows traction, to be applied directly on the skeleton. It is used in cases where a heavier pull is required or when skin traction is not appropriate for the body part needing treatment. This is less common now as most fractures are surgically fixed. The pins must be kept clean to avoid infection; the nursing staff will teach you how to do this.
A Steinman pin can be used [inserted in to the bone], the upper tibial site is the most common site used.

What is Counter traction?

Traction is often applied to a part of the body to counteract a deformity. To be effective the traction should act on the deformity and not the whole body. To counter the effect on the whole body we need another force that acts in opposite direction. This is counter traction.

Counter traction may be obtained by altering the angle of the body-weight force in relation to the pull of traction, such as by elevating the foot of the bed to enable body weight to act as a counter force. Counter traction is an important aspect of traction treatment. So you will find that your bed will be tilted.

Thomas splint traction

The Thomas splint is used in conjunction with skin traction or skeletal traction to immobilise and help position fractures of the femur. It can be used in all age groups and involves application of a long leg splint with a hoop or ring that extends beyond the foot which can then be fixed, for example, to the end of the bed or suspended in a balanced system using skeletal or skin traction like in the picture above.
**Suspended Thomas splint**

![Image of suspended Thomas splint]

**Important Information to note:**
- Your bandages will be checked every day
- Please report any calf pain, loss of sensation, tingling, numbness to nursing staff.
- Inform the nursing staff if the weights are touching the floor.
- Your bed can be lowered to use a bedpan or urinal (bottle) and then the traction needs to go straight back on.
- You can tilt your body slightly which may help to prevent pressure sores.
- Please inform the nursing staff if you experience any increased discomfort in the groin region.
- Please inform the nursing staff if you notice any increased swelling of the limb or you feel your leg has moved out of position.
- You can be provided a monkey pole if required to enable easier mobility in bed.
If your symptoms or condition worsens, or if you are concerned about anything, please call your GP, 111, or 999.

**Patient Experience**
We know that being admitted to hospital can be a difficult and unsettling time for you and your loved ones. If you have any questions or concerns, please do speak with a member of staff on the ward or in the relevant department who will do their best to answer your questions and reassure you.

**Feedback**
Feedback is really important and useful to us – it can tell us where we are working well and where improvements can be made. There are lots of ways you can share your experience with us including completing our Friends and Family Test – cards are available and can be posted on all wards, departments and clinics at our hospitals. We value your comments and feedback and thank you for taking the time to share this with us.

**Patient Advice and Liaison Service (PALS)**
If you have any concerns or questions about your care, we advise you to talk with the nurse in charge or the department manager in the first instance as they are best placed to answer any questions or resolve concerns quickly. If the relevant member of staff is unable to help resolve your concern, you can contact the PALS Team. We offer informal help, advice or support about any aspect of hospital services & experiences.

Our PALS team will liaise with the various departments in our hospitals on your behalf, if you feel unable to do so, to resolve your problems and where appropriate refer to outside help.

If you are still unhappy you can contact the Complaints Department, who can investigate your concerns. You can make a complaint orally, electronically or in writing and we can advise and guide you through the complaints procedure.

**How to contact PALS:**
**Telephone Patient Services: 0300 123 1732 or via email at: wah-tr.PET@nhs.net**

**Opening times:**
The PALS telephone lines are open Monday to Thursday from 8.30am to 4.30pm and Friday: 8.30am to 4.00pm. Please be aware that a voicemail service is in use at busy times, but messages will be returned as quickly as possible.

If you are unable to understand this leaflet, please communicate with a member of staff.