

Traction Principles

Indications for Traction

-
- reduction, immobilisation & alignment of fractures
-
- relieve muscle spasm & pain
-
- prevent further soft tissue damage
-
- to promote rest

Components

-
- countertraction
-
- weights, angles & pulleys

Types

-
- Adhesive and non adhesive skin traction - application of a pulling force directly on the patient's skin
-
- Skeletal traction - attached directly to bone by use of wires and pins
-
- Manual traction - applied with the hands to temporarily immobilise the injured part

Nursing Management

-
- obtain doctors orders for type of traction and weight required, determine whether intermittent or continuous
-
- ensure weight is hanging free off the floor
-
- maintain alignment of rope(s), pulley(s) & weight
-
- rope should move freely over pulleys
-
- ensure countertraction applied - elevate foot of bed or keep head of bed flat
-
- skin traction needs to be removed at least once per day for hygiene & reapplication
-
- manual traction ought to be used during removal
-
- maintain traction weight when log rolling patients for PAC
-
- skeletal traction requires daily pin site care and nightly according to ooze
-

use cue-tips & normal saline

-

observe for signs of infection

-

encourage patient to perform own pin site care

-

apply dressing if copious ooze

-

neurovascular checks Q4H

-

encourage deep breathing and coughing exercises and use of trifold

-

encourage bed exercises & physio

-

assessment of skin integrity each shift

-

pain assessment & management

-

maintain position of patient in bed - avoid external rotation of effected lower limb

-

prompt reporting of changes in neurovascular status, unrelieved pain, pin loosening / infection

Rationale

-

traction only applied under doctor's orders

-

maintain integrity of traction

-

balances force of pull

-

monitor skin integrity especially bony prominences, at risk of developing pressure sores

-

removing weight interrupts traction force, can cause spasms

-

minimise risk of pin site infection & potential osteomyelitis

-

risk of neurovascular compromise due to pulling force on vessels & nerves

-

risk of respiratory compromise due to immobility, recumbent or semirecumbent position

-

may put pressure on peroneal nerve

-

ensure prompt intervention & treatment of complications

References:

Maher, A. Salmond, S., & Pellino, T. (2002). Orthopaedic nursing. (3rd ed.). W.B.Saunders; Philadelphia.
Zychowicz, M.E. (Ed). (2003). Orthopedic nursing secrets.Hanley & Belfus, Inc. USA.
Compiled by Gail Bowis CN Educator,Wesley Hospital, February 2006

Disclaimer: This information is intended as a guideline only and reflects the consensus of the authors after a literature review. The sources used are believed to be reliable and in no way replace consultation with a Health Professional.