

P.T. open lung given to - ↑ respiratory

- mobilize secretions.
- improve physical mobility.

CPT for neonates & infants:

- 1) positional rotation. - prevents pooling of secretions
 - upper lobes & Rt middle lobe common sites of airway collapse & atelectasis in infants
 - rotation done every 2 hrs.
 - co-ordinate position change & other nursing procedures.
 - monitor vitals.
 - NO head down posⁿ for 1 hr after eating
- avoid aspiration of regurgitated food.

Postural Drainage:

- All P.D. positions safe.
- precautions for Trendelenburg posⁿ
 - abdominal distenⁿ
 - congestive heart failure
 - dysrhythmias.
 - hydrocephalus.
 - episodes of apnea & bradycardia
 - acute resp. distress.

- using single cupped hand, tenting 3 or 4 fingers
- precautions - unstable cardio-vascular / O_2 status
 - sub. emphysema.
 - intraventricular hemorrhage.

contraindications - healing thoracotomy incision.
 - respi distress alt tib.

Suctioning:-

- Bagging done in a bag attached to a pressure manometer to make sure safe limits are not exceeded. done in hyperoxygenation.
- suction done for no more than 5 sec

CPT for children (2 yrs & older)

Positional Retention:-

- every 2 hrs.
- deep breathing encouraged by blowing bubbles, tissue papers, balloons
- for children above 4 yrs to 5 yrs → give instructions for diaphragmatic breathing, pursed lip, reg, let control breathing.
- pediatric incentive spirometers also available.
- teach splinting in pillow / stuffed toy for comfort while coughing. - teach arm, shoulder & trunk

P.T. of pt. with COPD

Goals of P.T. of pt. include-

- maximizing pt's quality of life, general well being
- educate about diet, self-management, nutrition, wt. control, smoking cessation, cardiac risk factors, life style modification, avoiding static exercise, straining &Valsalva maneuver.
- maximize aerobic capacity & efficiency of O₂ transport.
- optimize physical endurance & exercise capacity.
- ↓ work of heart
- optimize general muscle strength & peripheral O₂ extraction.

★ Physiotherapist's involves management of pts with valve defects either medically or surgically.

After surgical management:-

Goals of Post-op P.T. management

- maximize airflow
- maximize chest wall vol.
- optimize chest wall ventilation & perfusion, mucous clearance
- minimize closing vol.
- optimize mucociliary transport & clearance.
- optimize V/Q matching
- maximize chest tube drainage.
- promote optimal lymphatic drainage.
- minimize risk of aspiration

minimize work
& heart.

- maximize chest wall mobility.
- optimize posture alignment.
- optimize peripheral bld flow, velocity & muscle pump action.
- maximize cardio-pulmonary endurance.
- optimize relaxation.
- maximize joint ROM, muscle length & lig. integrity, ADLs.
- maintain normal cognitive fx

↳ A Goals achieved & - general mobility ex;
- chest care & care
- early ambulation.

- to prevent thromboemboli & pulm. emboli
& risk of skin breakdown → mobilization &
activation of muscle pumps & frequent body
posⁿ changes.

- compression stockings could be given → to facilitate
venous return & ↑ bld. flow & velocity & ↓ risk
of thrombus formation.

- pts undergoing major thoracic surg / CV surg
are mech. ventilated for several hours &
transferred to ward once vitals & have stabilized,
wounds are not draining & pt. is alert enough.

- Atelectasis & expirⁿ ~~are~~ ^{entirely} ~~are~~ ^{are}
- significant risks - ^{promote} ~~promote~~ ^{optimal} ~~optimal~~ ^{ventilator} ~~ventilator~~ ^{chest} ~~chest
 - maximize lung vol. & capacities,
 - minimize closing vol.
 - max. exp. flow rate~~

- areas most susceptible to atelectasis :- left lower base of cv surgical pt., areas adjacent to a lobectomy / segmentectomy.

- After surgery pts. are lethargic & diff. to arouse
 - trauma to surgery.
 - anesthesia
 - fluid loss
 - incisions.
 - healing process.

- Relaxed state induced by anesthesia, sedation & narcotics ↑ risk of expirⁿ → risk red^{uce} by nausea & vomiting also. ∴ anesthesia & narcotics

↓
∴ make pt. change positions freq. & move about as much as he can.

- P.T. must be familiar w/ pt's medications & their indications, side effects & contraind. & club tlt ∴ max. effect of ~~medic~~ medicⁿs.
- encourage upright posⁿ coordinated c^o breathing ^{with} coughing & supported coughing as soon as pt. ~~able~~