

STABILITY AND EQUILIBRIUM

DOWN

with

GRAVITY





SUSPENSION THERAPY

Suspension:

- ❑ Suspension is the means whereby parts of the body are supported in slings and elevated by the use of variable length ropes fixed to a point above the body.
- ❑ Suspension frees the body from the friction of the material upon which body components may be resting and it permits free movement without resistance when the fixation is suitably arranged relative to the supported part.



STARTING POSITIONS

- Posture follows movement like a shadow; every movement begins in posture & ends in posture. – Sherrington.
- Starting position – a posture from which movement is initiated which may be active or passive in character.
- 5 basic starting positions –
 - Standing
 - Kneeling
 - Sitting
 - Lying
 - Hanging

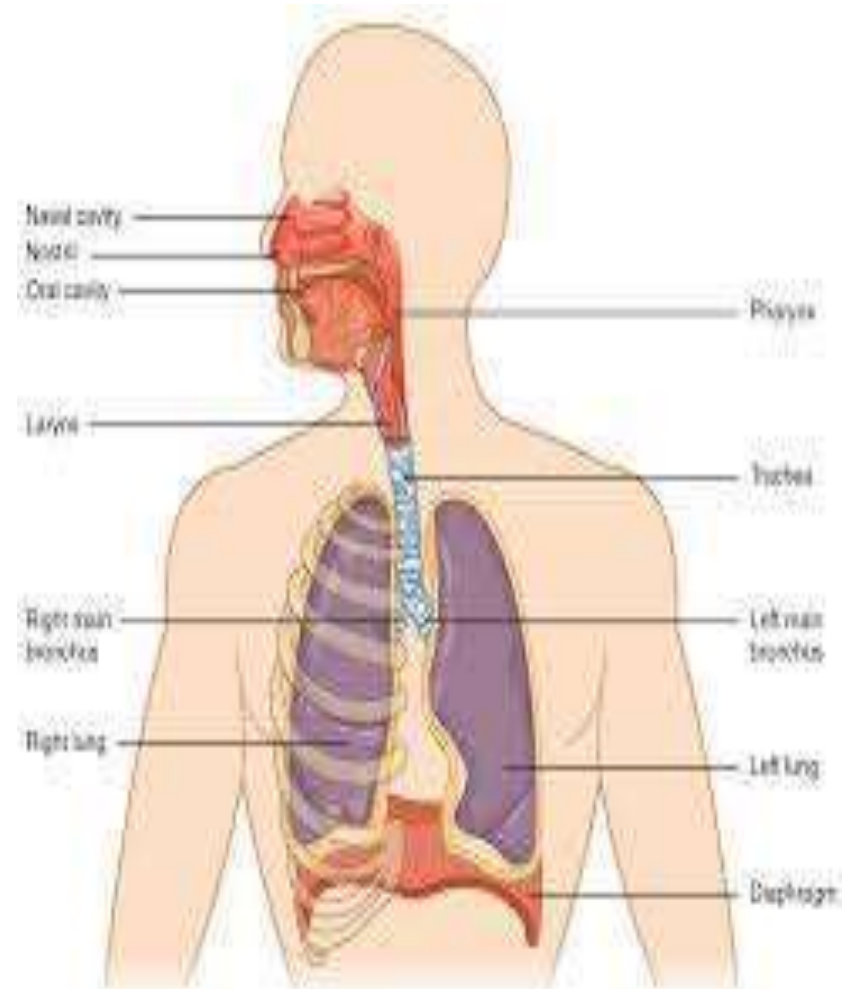
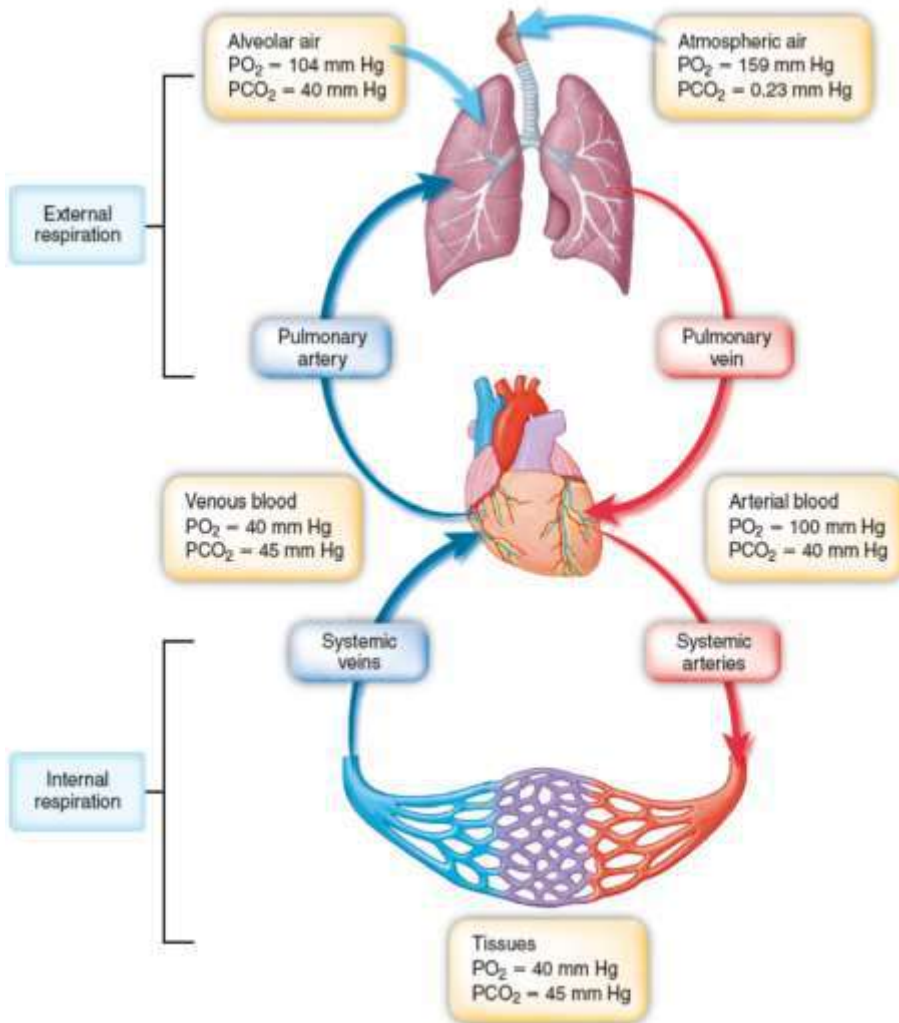
BREATHING EXERCISES



LET'S REVISE....

Anatomy of respiratory system

RESPIRATION



JOINT MOBILITY

INTRODUCTION

- **Definition** of mobility: ability of structures or segments of the body to move or to be moved in order to allow ROM for functional activities.
- Classification of joints according to Movements available



ARTERIAL BLOOD GAS ANALYSIS

Arterial Blood gas Analyser

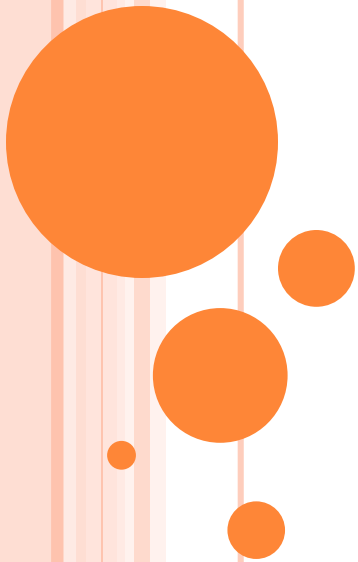
PRINCIPLE OF BLOOD GAS ANALYSER

BLOOD GAS ANALYSER works with three in-built electrodes

1. pCO_2 electrode
2. pO_2 electrode
3. pH sensitive glass electrode



EFFECTS OF IMMOBILITY

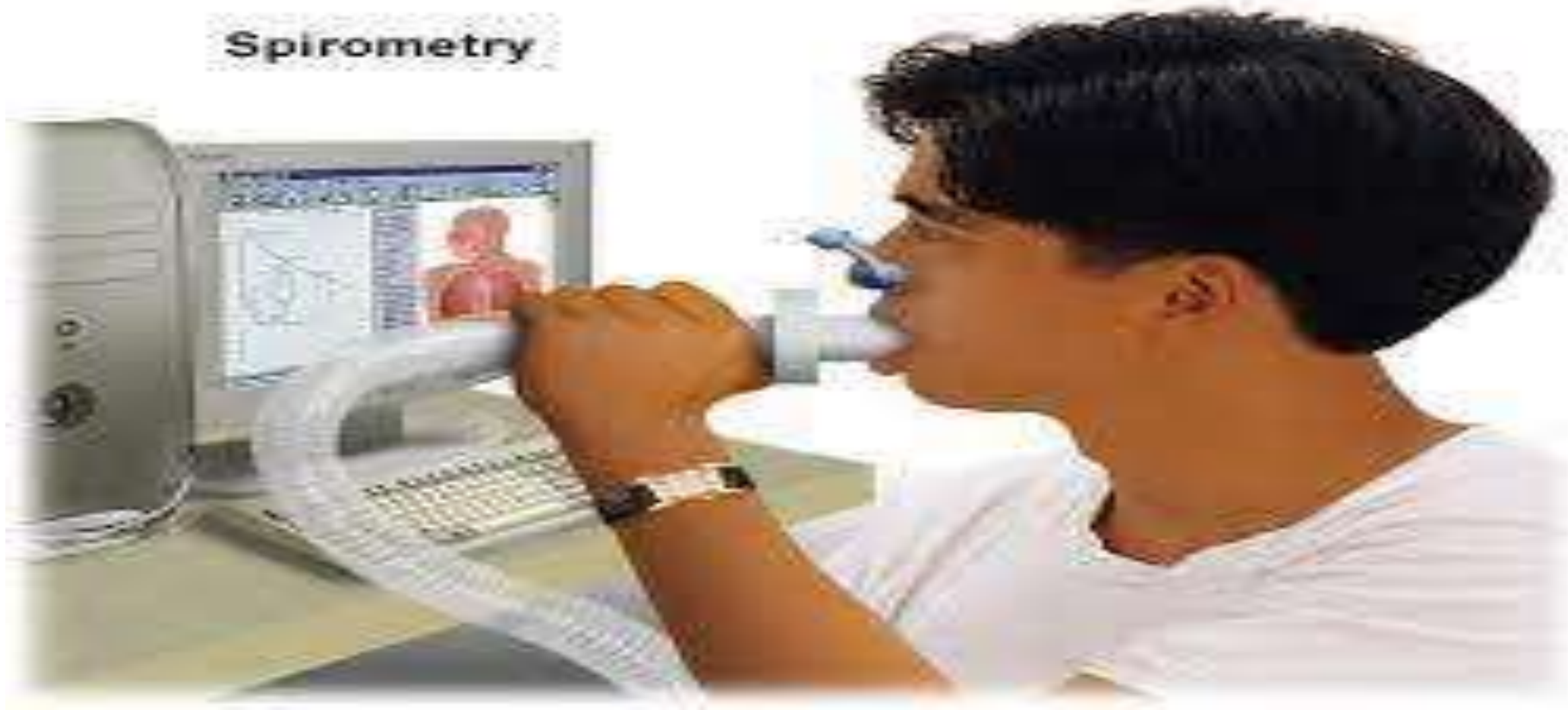


FACTORS LEADING TO IMMOBILIZATION

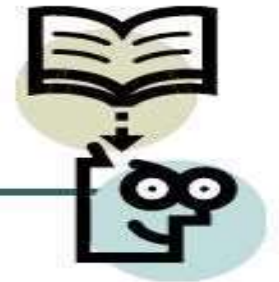
- Confinement to ICU
- Skeletal traction, casting and splinting
- neurological deficits like tonal abnormalities and muscle imbalance
- Pain
- General debilitation leading Confinement to bed
- Use of monitoring equipments



SPIROMETRY

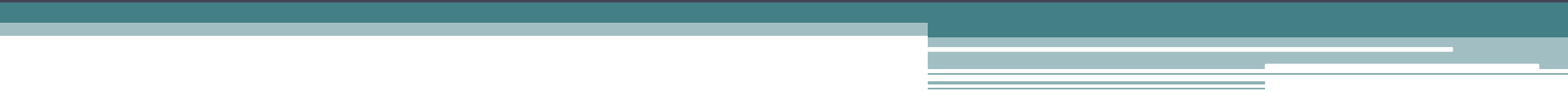


Pulmonary Function Tests



- Pulse oximetry
- Blood gases
- End tidal CO₂
- Spirometry
- Peak expiratory flow rate
- Bronchial challenge testing
- Exercise tests
- Respiratory muscle pressure measurement
- Lung volumes by helium dilution or body plethysmography
- Diffusing capacity

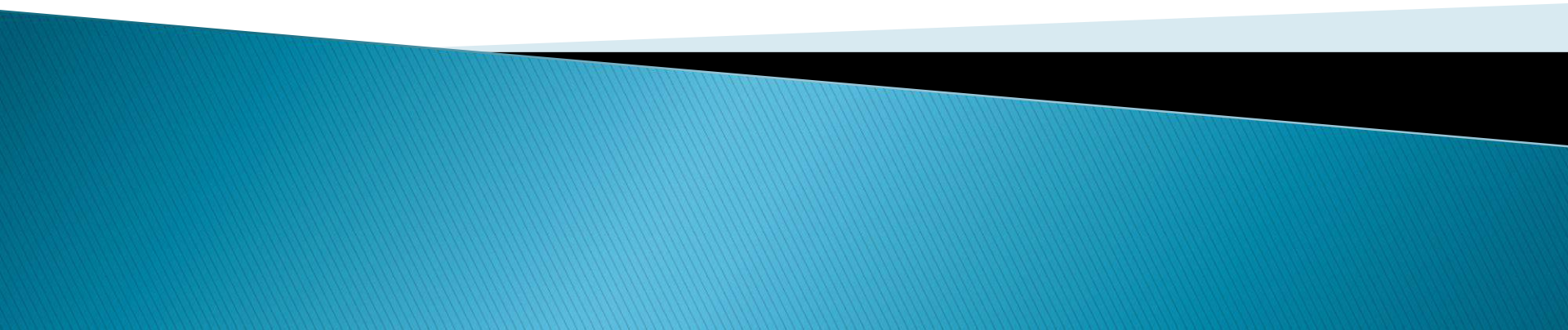
PRINCIPLES OF PHYSIOTHERAPY MANAGEMENT IN ABDOMINAL SURGERIES

A decorative graphic consisting of a solid teal horizontal bar at the top, followed by a white horizontal bar, and then three thin, parallel teal horizontal lines on the right side of the white bar.

OBJECTIVES

- ❖ Understand different abdominal surgeries performed and types of incision
- ❖ Know common post-operative complications
- ❖ Be able to assess and treat pre and post operative abdominal surgery patients.

AMPUTATION



COMPLICATIONS:

EARLY COMPLICATIONS:

- 1) Haemorrhage .
- 2) Infection of soft tissues and bone. Abscess may be found which requires drainage and antibiotic treatment.
- 3) Amputation may be followed by DVT and pulmonary embolism in the early postop days. So subcutaneous heparin 5000 units twice daily is strongly advised for several weeks after surgery.
- 4) Gas gangrene may occur particularly in mid thigh amputation.



REHABILITATION OF AN AMPUTEE



GOAL

- ◎ TO OPTIMISE INDEPENDENT FUNCTION FOR ADL, INDEPENDENT OUTDOOR AND INDOOR MOBILITY, USE OF TRANSPORT FACILITY, RETURN TO LEISURE/HOBBY/ WORK/ SOCIETY.

MODES OF MECHANICAL VENTILATION

Dr. Aditi Soman(PT)

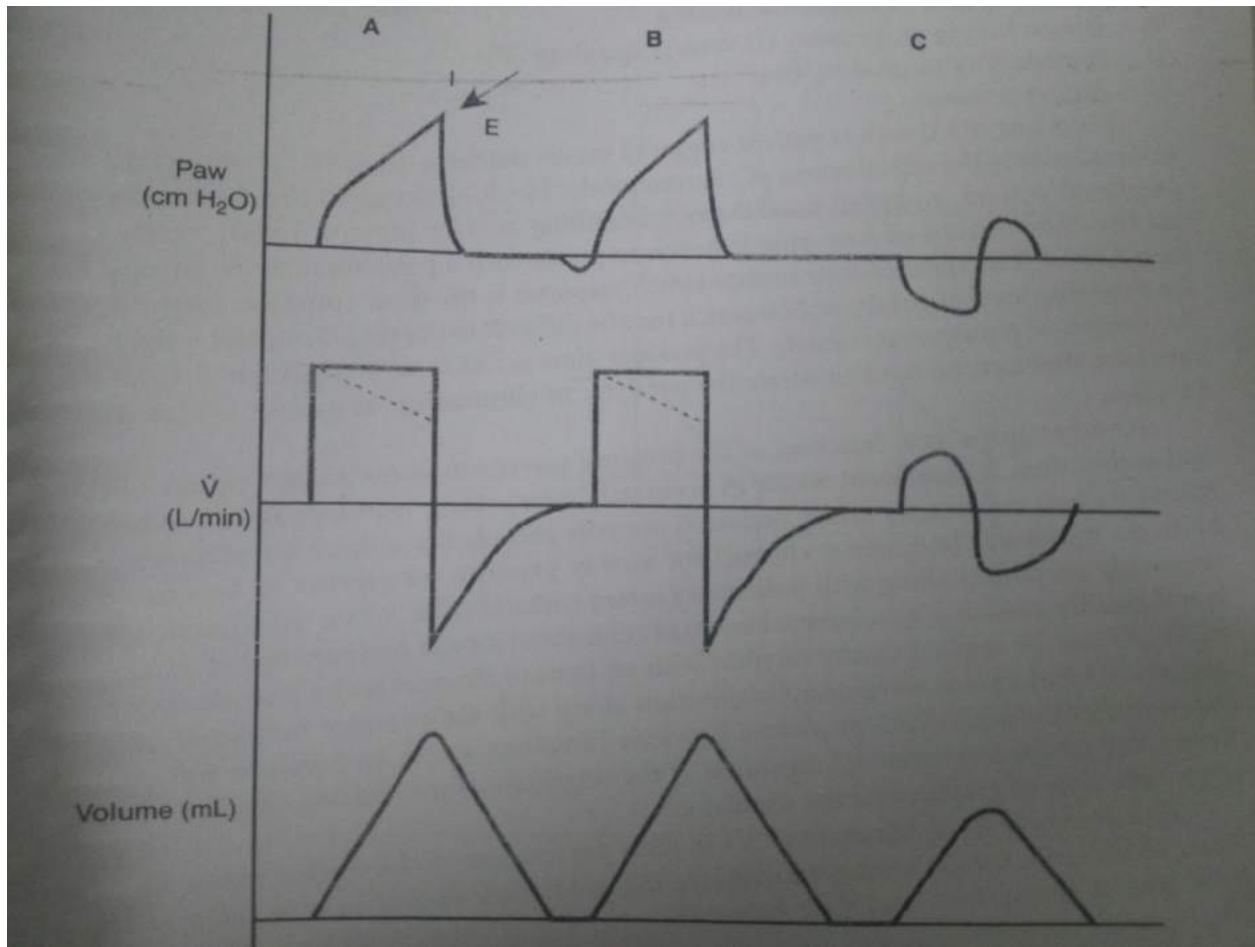
OBJECTIVES

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- To understand different commonly used modes of mechanical ventilation ,their indications, advantage, disadvantage and areas of monitoring...

VENTILATOR GRAPHICS AND COMPLICATIONS OF POSITIVE PRESSURE VENTILATORS





OXYGEN THERAPY



OBJECTIVES

- To understand use of oxygen as drug and its side effects
- To be able to identify different oxygen delivery devices.
- To be able to determine amount of oxygen delivered with particular oxygen delivery device.

