MEANING OF POSTURE

POSTURE CONCERNS THE WAY AN INDIVIDUAL

CARRIES HIMSELF/HERSELF WHILE SITTING,

STANDING, WALKING AND LYING.

Main causes of poor Posture.

- ACQUIRED - Due to some accident of disease.
- CONGENITAL - By birth or Heredity.

- Other causes of poor posture:-
- INJURY
- DISEASE
- HABIT
- WEAKNESS
- MENTAL ATTITUDE

- HEREDITY.
- IMPROPER CLOTHING.
- MALNOURISHMENT.
- CHRONIC FATIGUE.
- OVER LOAD.
- IMITATION.
- LACK OF EXERCISE.
- OBESITY.
- OCCUPATION CONDITIONS.
- POVERTY.
- UNHYGENIC CONDITIONS.

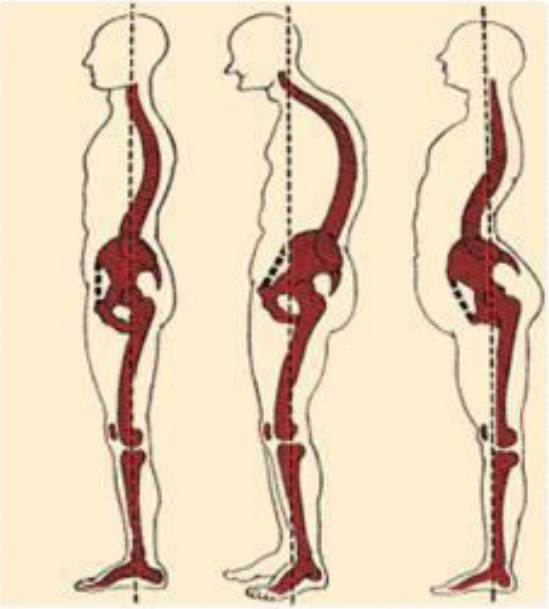
IMPORTANCE OF GOOD POSTURE.

- GOOD APPEARANCE.
- MINIMUM USE OF ENERGY.
- GOOD HEALTH OR HEALTHY LIFE.
- HELPS IN DEVELOPING PHYSICAL FITNESS.
- PSYCHOLOGICALY STRONG.
- GOOD POSTURE KEEPS GOOD CIRCULATORY,RESPIRATORY,DIGESTIVE SYSTEMS.
- CONFIDENCE.
- DOING DAILY TASK EFFICIENTLY.

FLAT FOOT

POSTURAL DEFORMITIES

KYPHOSIS AND LORDOSIS



TYPES OF GOOD POSTURE

STANDING POSTURE:-

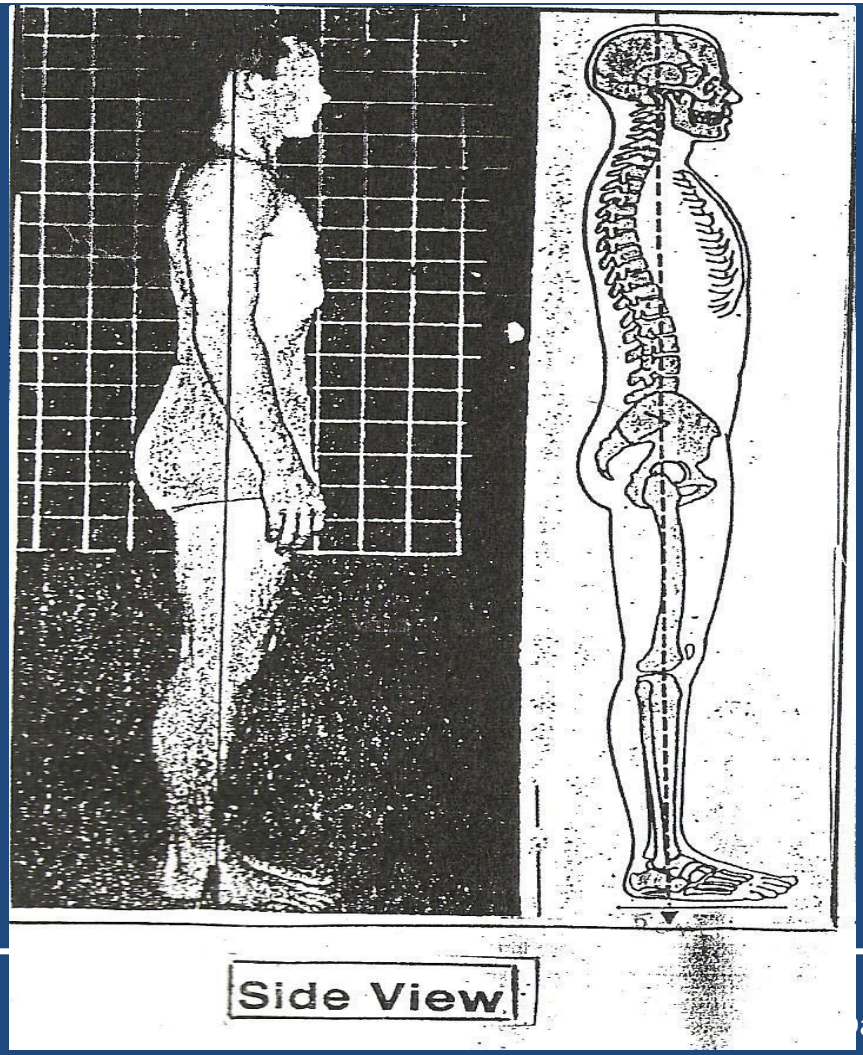
Standing posture of an individual is generally considered as the basic posture .

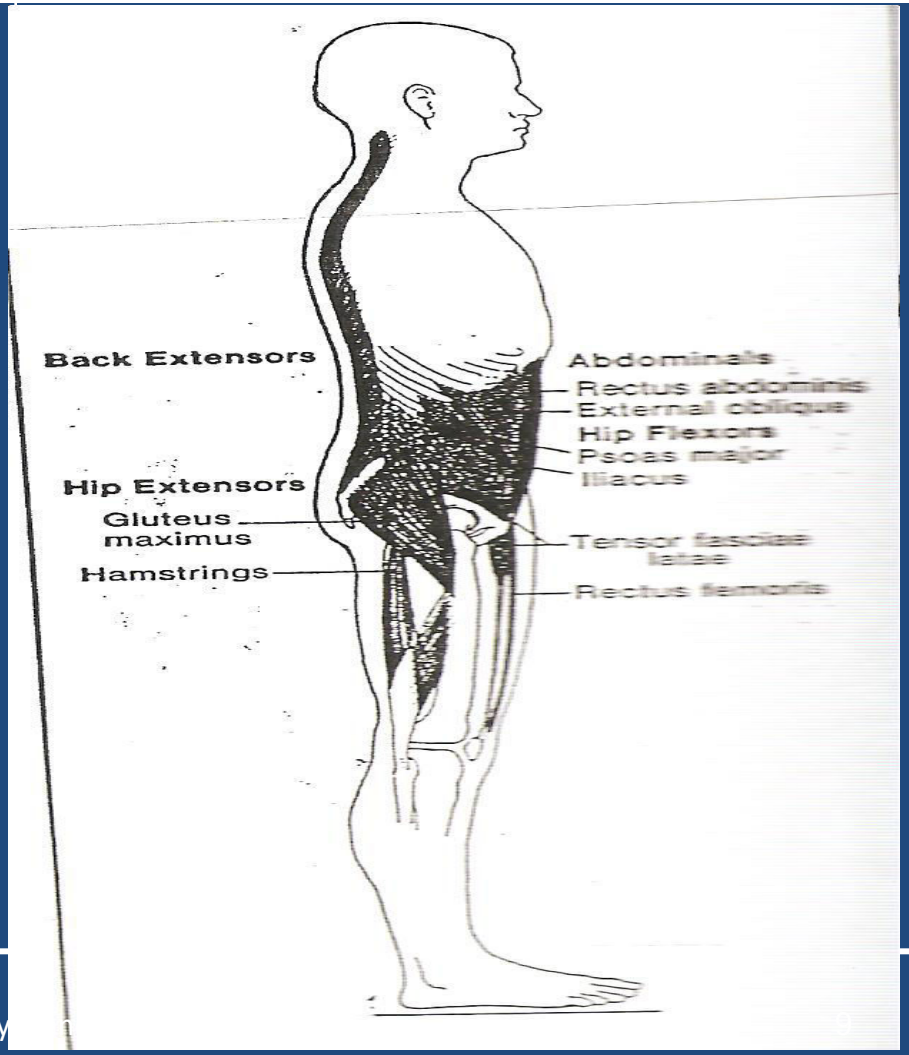
In standing position weight should be equally distributed between the ball of the foot and the heel.

Gravity

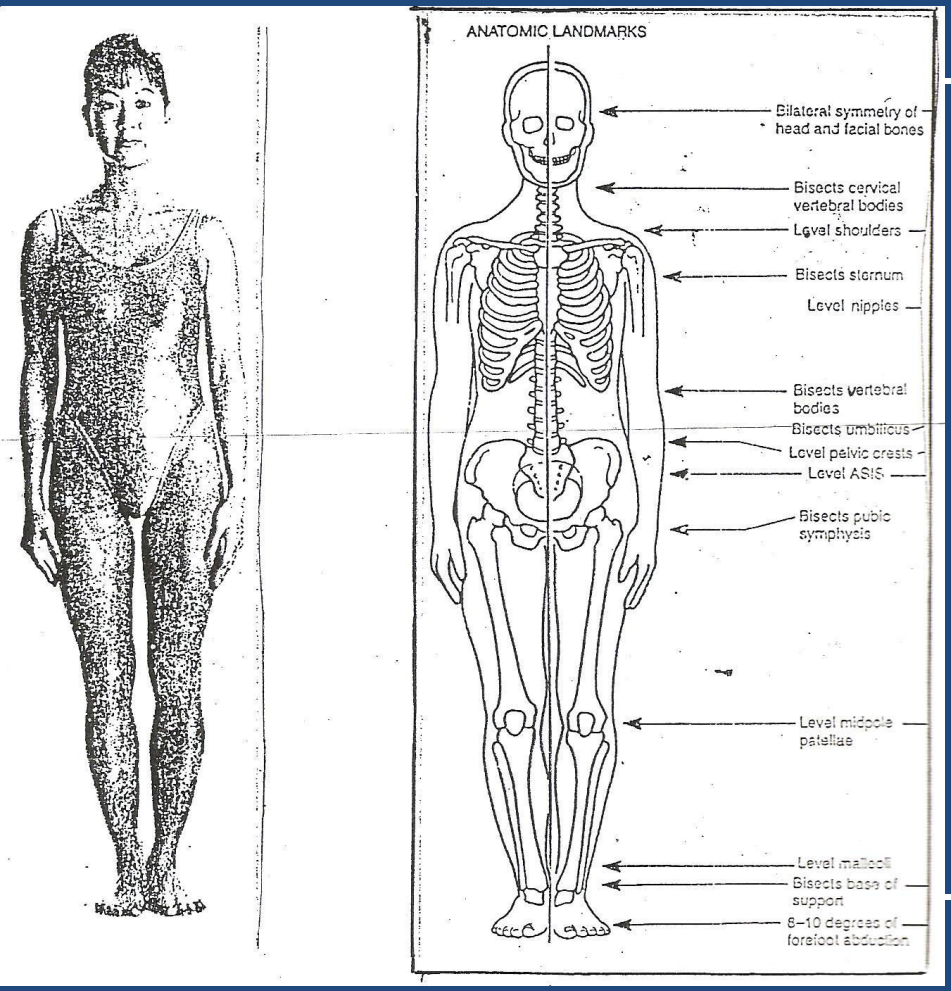
- **Places stress on structures responsible for maintaining the body's upright posture.**
- **Normally gravitational line goes through the physiologic curves of spinal column & they are balanced.**
- **If the wt. in one region shifts away from the line of gravity → the remainder of the column will compensate to regain equilibrium.**

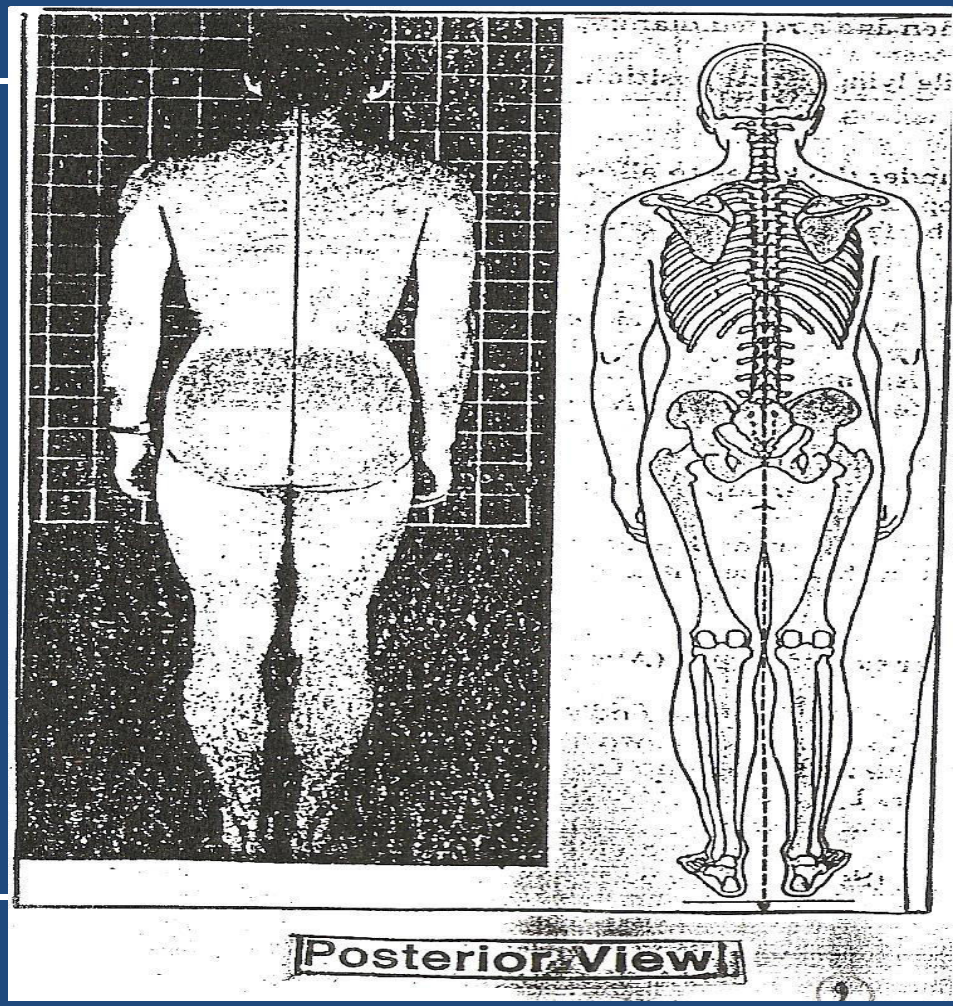
Side view (Lateral view)





Anterior view *Posterior view*

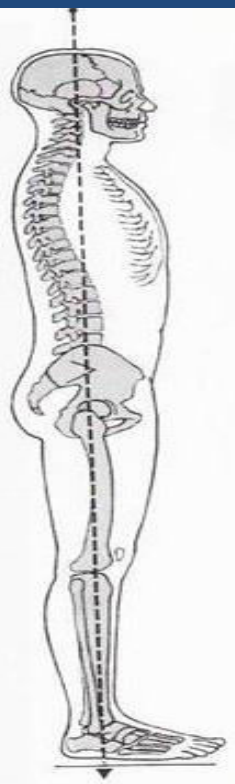


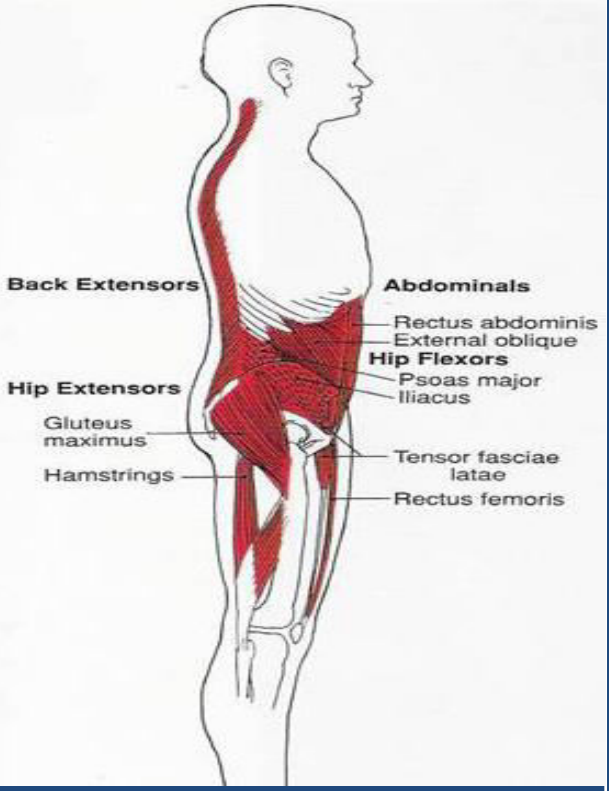


Characteristics & Problems of Common Faulty Postures

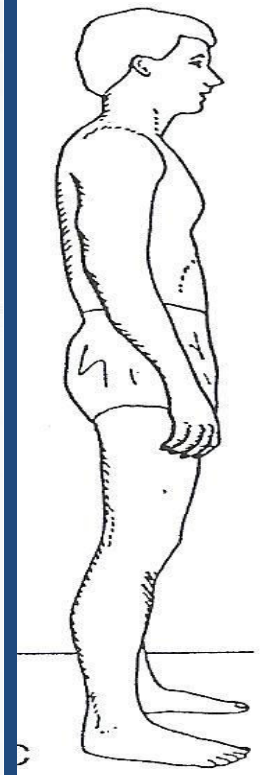
- **Pelvic & Lumbar Region**

1. Lordotic



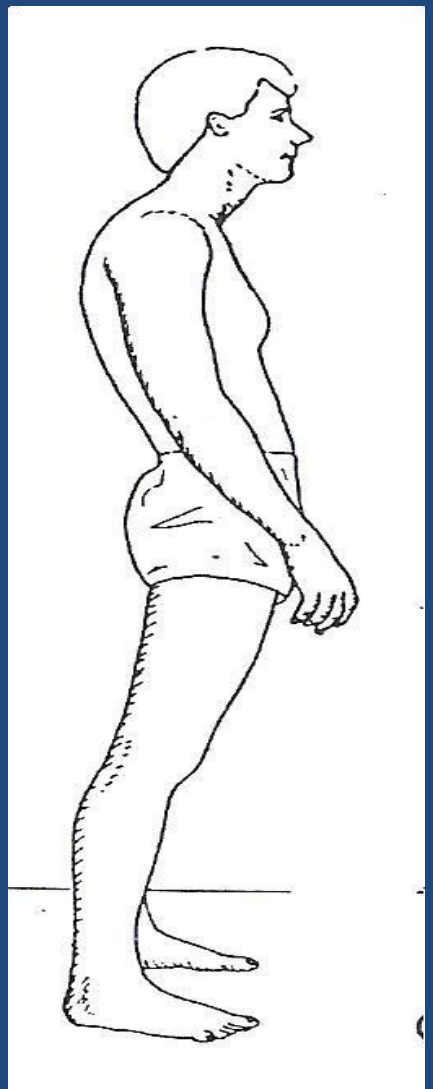


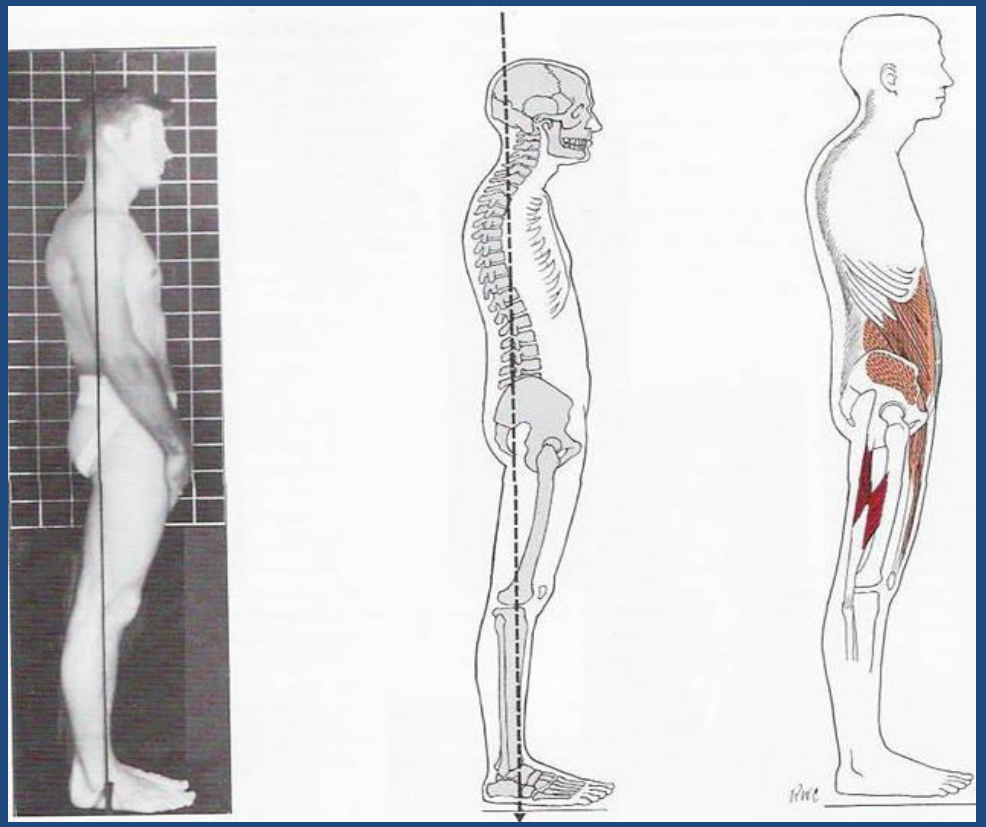
2. Flat low-back



Pelvic & Lumbar Region

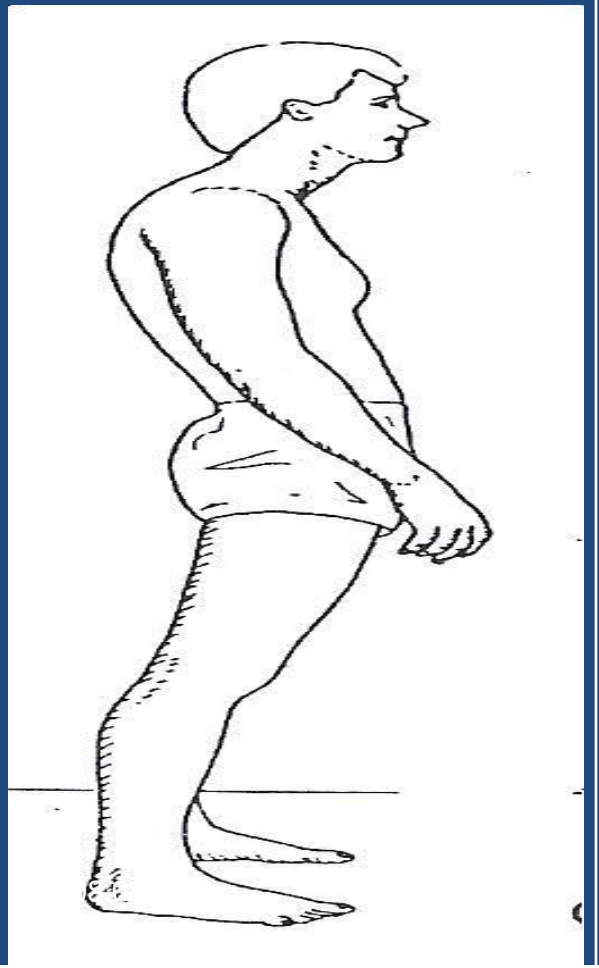
3. Sway Back (relaxed)



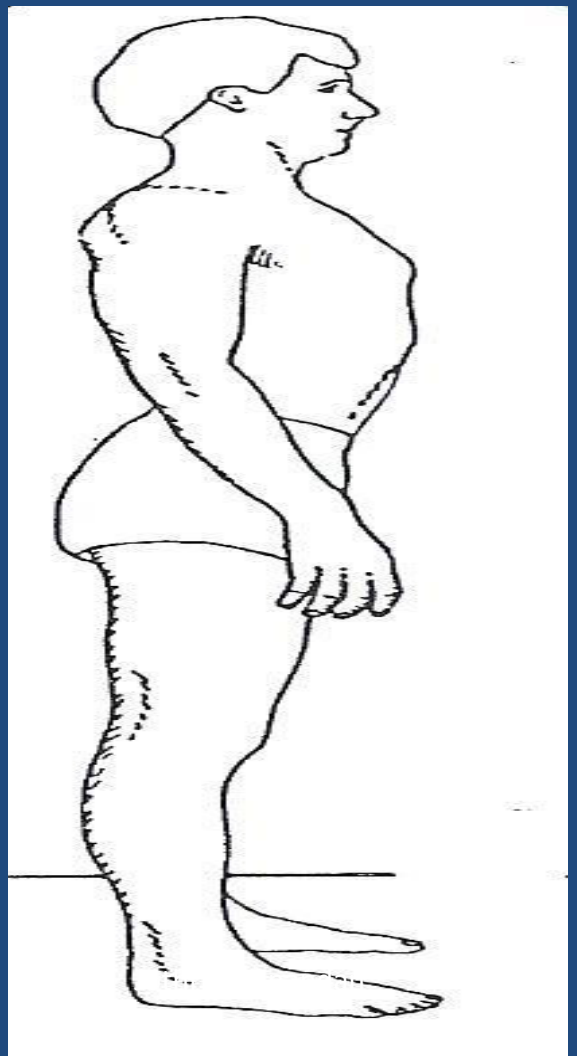


Thoracic Region

. Round back (kyphosis)



2. Flat upper back



3. Scoliosis

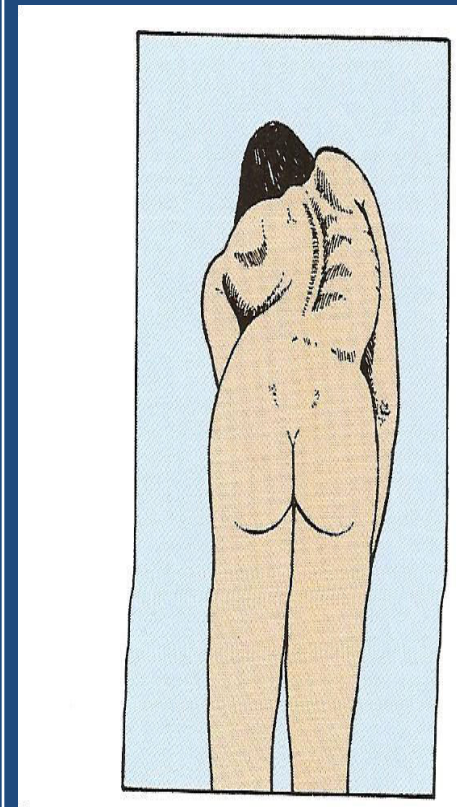
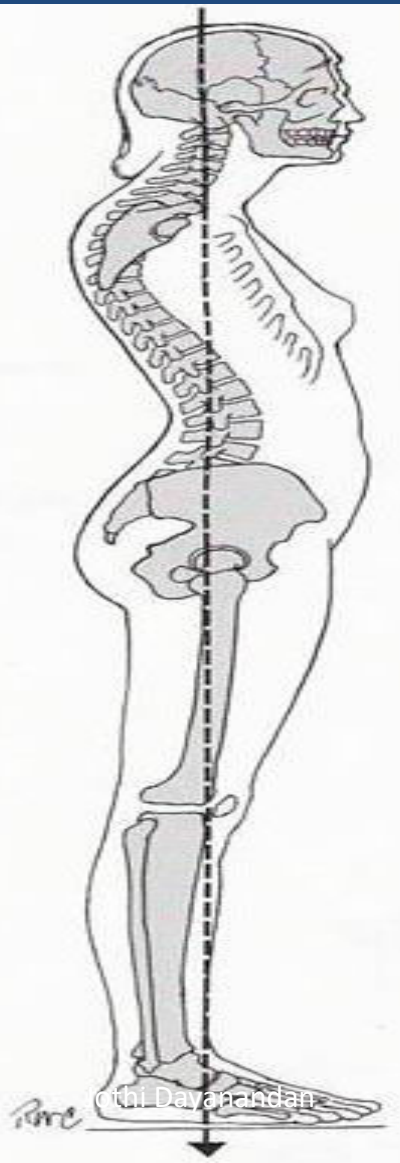
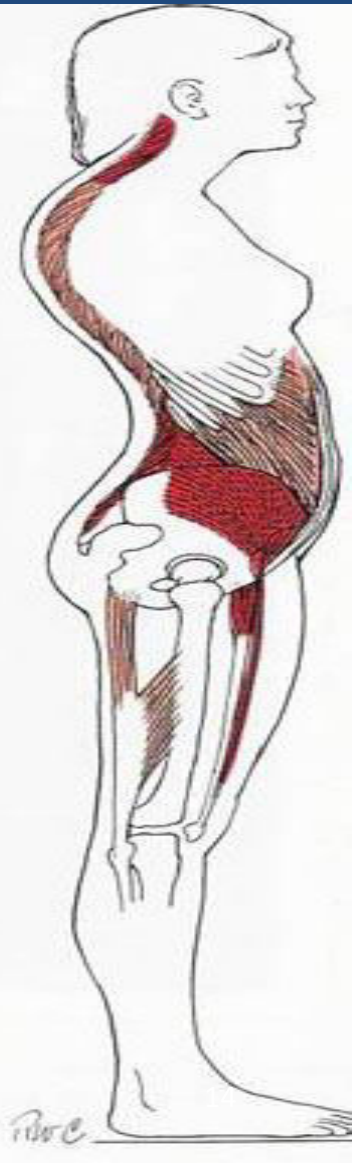


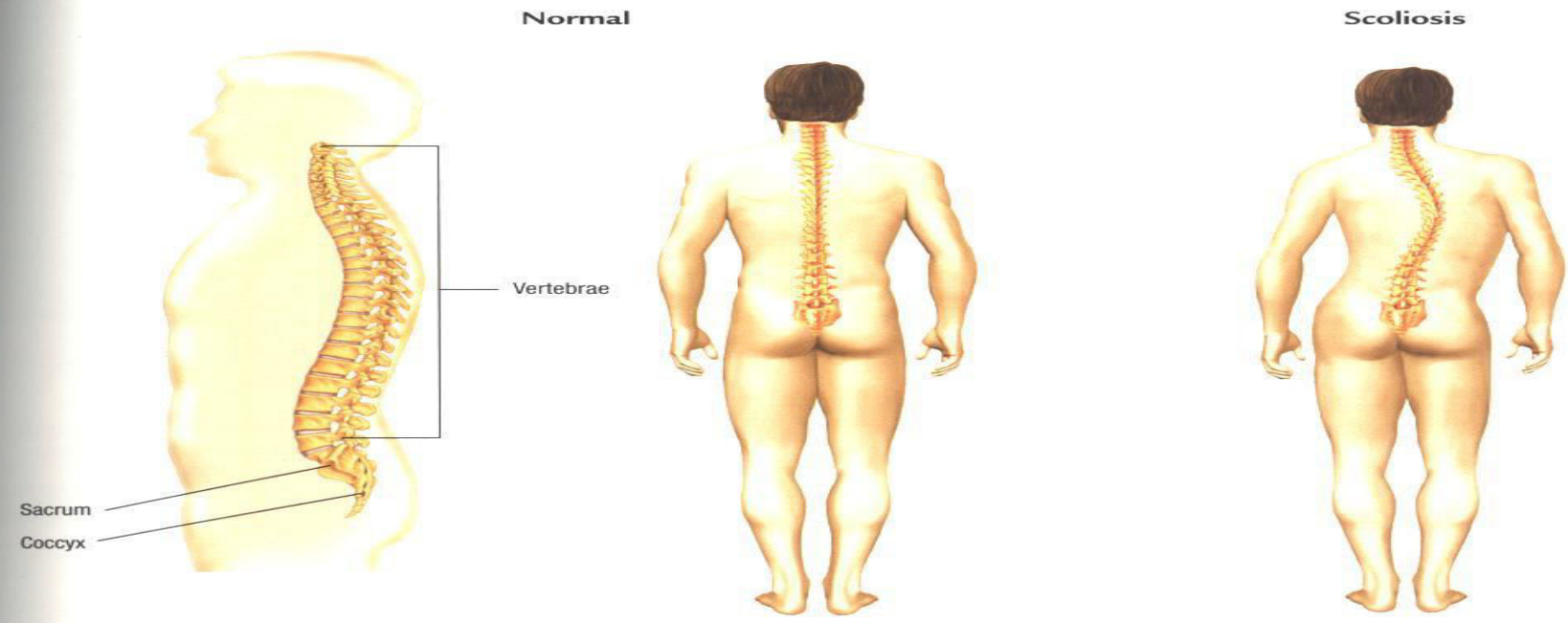
Figure 38-10 Rotation and curvature of scoliosis. Scoliosis screening involves viewing the individual from behind, which discloses scapular asymmetry caused by not only curvature but also true rotation of the spine.

Kypholordotic Posture



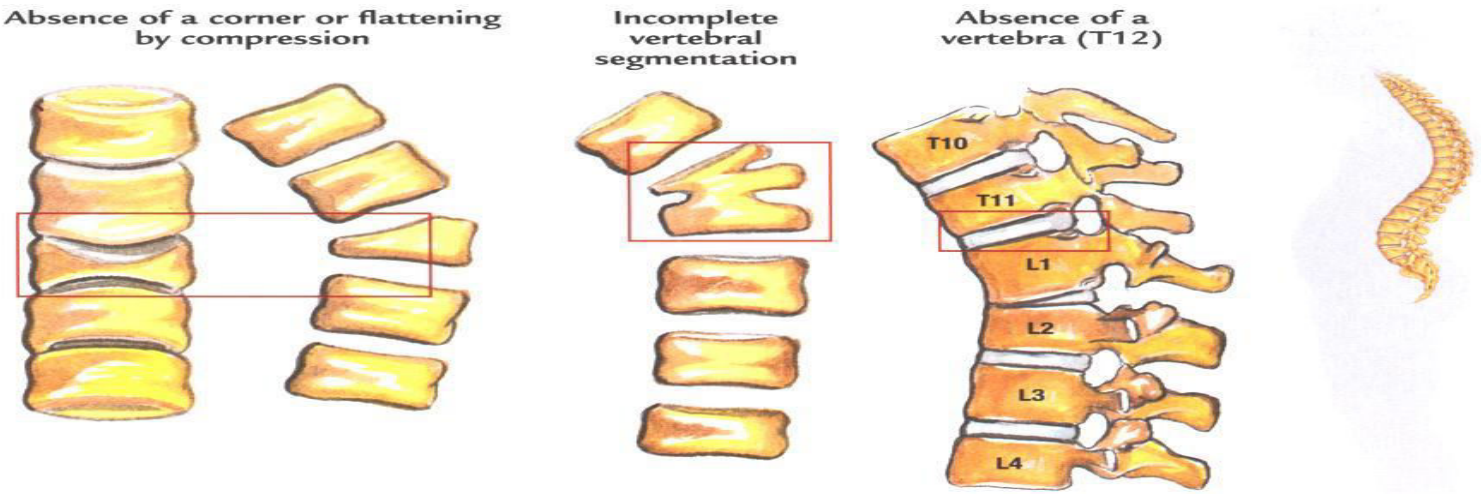


NORMAL AND ABNORMAL CURVATURES OF THE SPINE



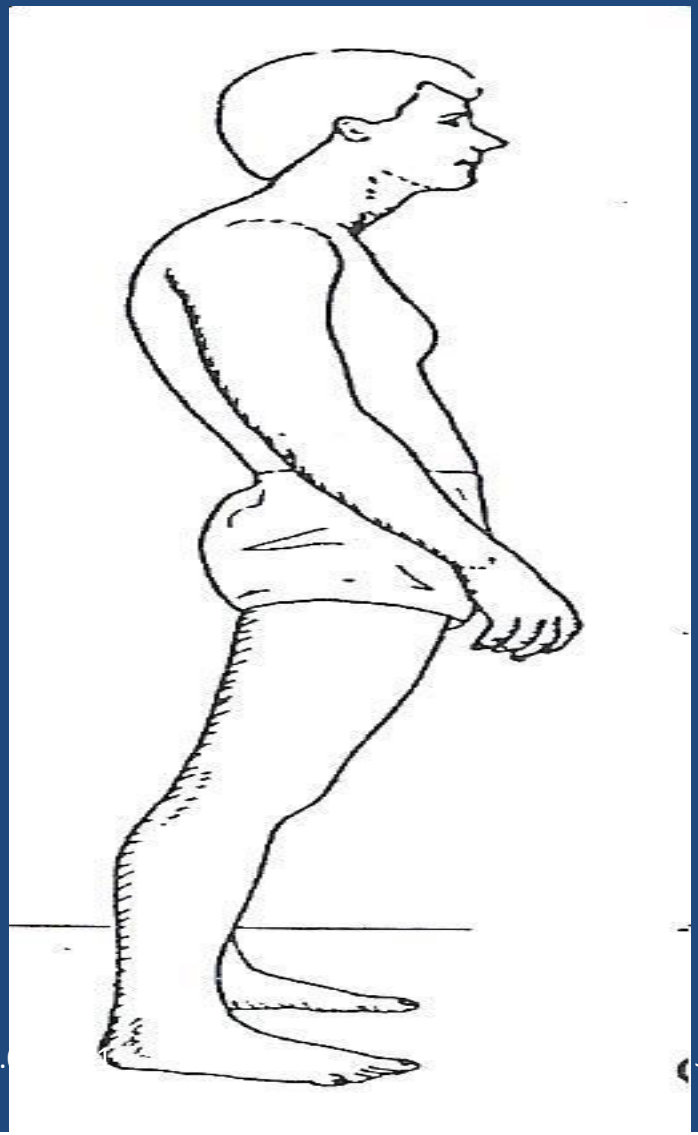
LORDOSIS

CAUSES OF KYPHOSIS

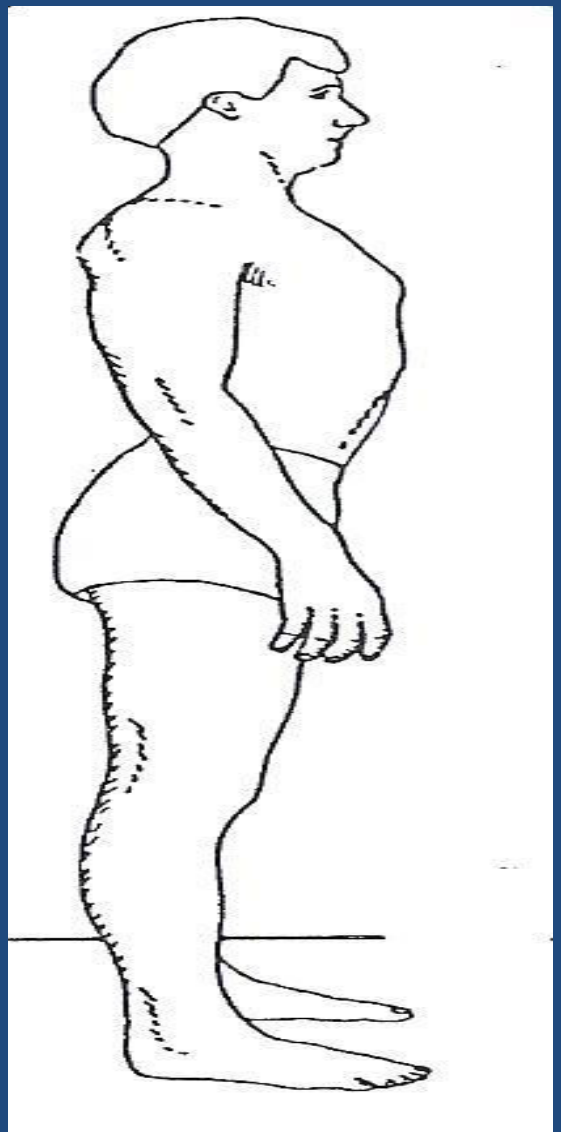


Cervical Region

1. Forward head posture



2. Flat neck



General Treatment Goals and Plan of Care

	Treatment Goals		Plan of Care
1.	Relieve pain & m. tension.	1.	Modalities & massage. Muscle relaxation training. - Correct postural stress using goals 2 through 4.
2.	Restore ROM.	2.	- Specific stretching & flexibility exs.
3.	Restore m. balance.	3.	Specific resistive exs. - External support to prevent positions of stretch.

	Treatment Goals		Plan of Care
4.	Retrain kinesthetic awareness & retrain control of normal alignment.	4.	- Reinforcement techniques
5.	Teach the pt. how to manage posture to prevent recurrences	5.	-Teach proper body mechanics. -Educate pt preventive exs & mechanics for relief of mechanical stress in ADL. -Teach relaxation exs to cope with m. tension. -Instruct pt. on how to modify environment: bed, chairs, car, seat, work area.

Procedure & techniques for treating problems that occur with postural pain syndromes & dysfunctions:

- **They are appropriate if:**
  - Following a comprehensive assessment of the pt's history & clinical S&S.
  - It is determined that the pt isn't suffering from acute injury or disk derangement ,but the pain is due to stresses of poor or flexibility & strength losses.

- **Not all procedures are appropriate for all pts.**
- A variety of exs are described, allowing the PT to make a careful selection of which ones best meet the goals for each pt.

A. Procedures to Relieve Pain & Muscle Tension.

1. *Heat Modalities & Massage:*

- **Sources of heat: IR, hot packs, electrical packs.**
- **Myofascial release & massage.**
- **TENS.**
- **Interferential therapy for deep pain.**

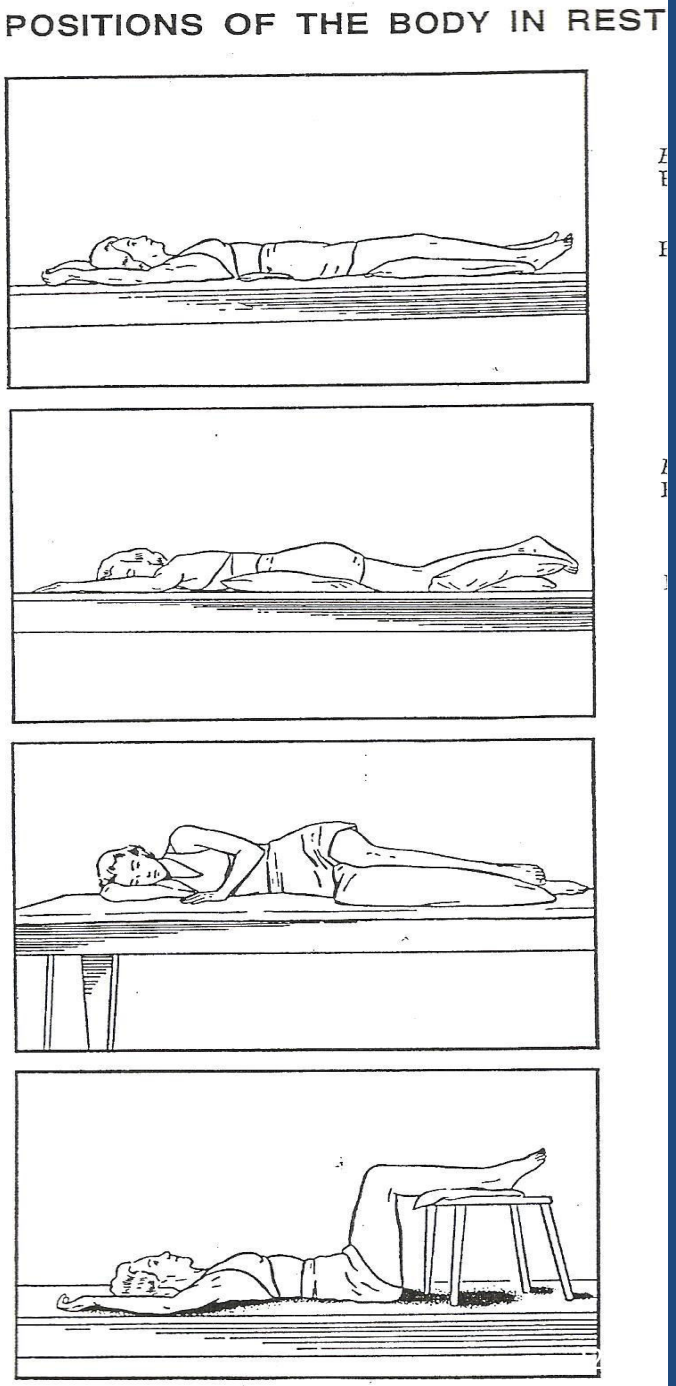
2. ***Determining the relationship of faulty posture to the development of pain.***

3.*<u>Muscle relaxation techniques</u>*

- a. Active ROM.
- b. General conscious relaxation techs.

c. Conscious relaxation specific for cervical region.

Positions of The Body in Rest



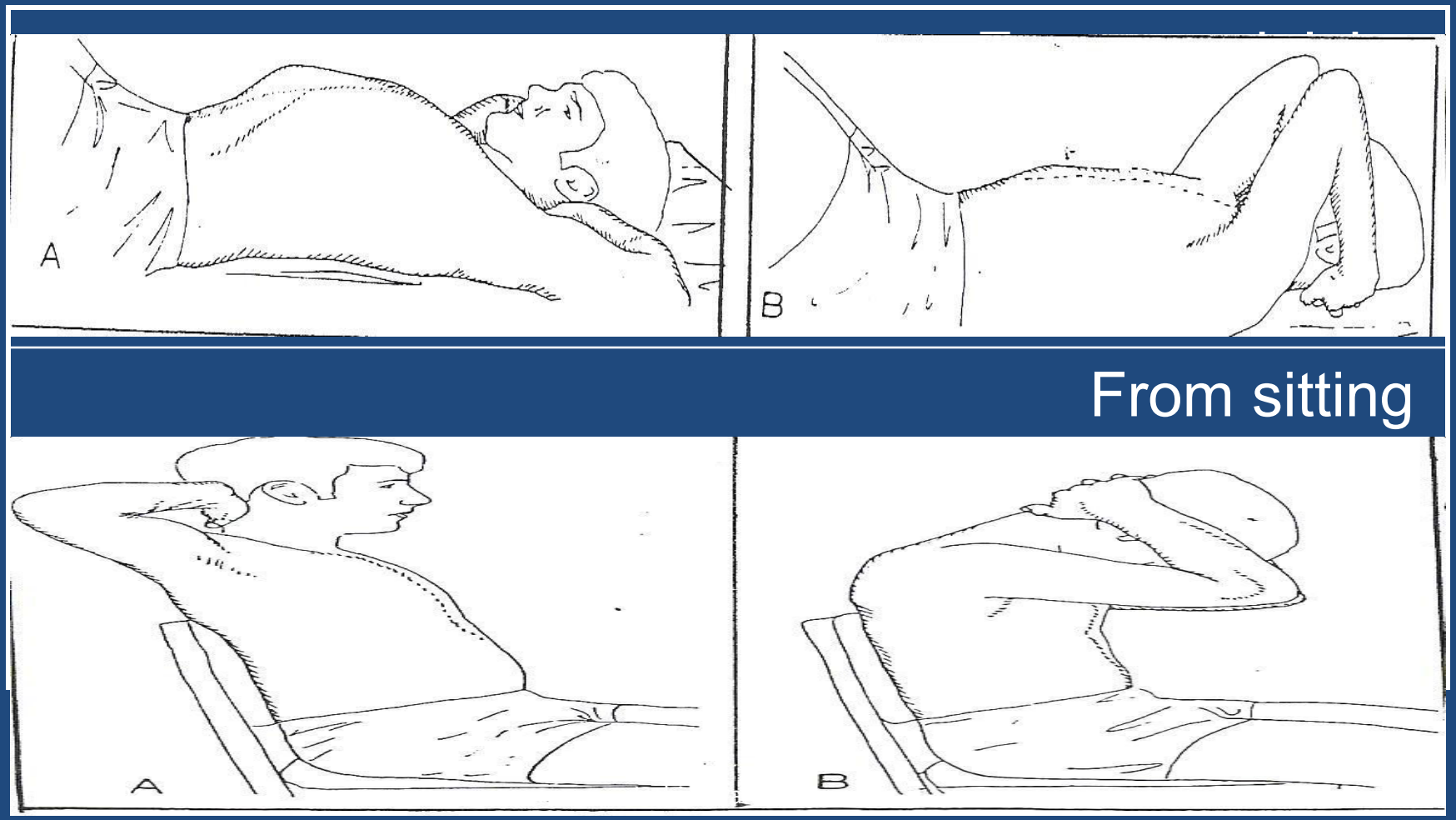
Jothi Dayanandan

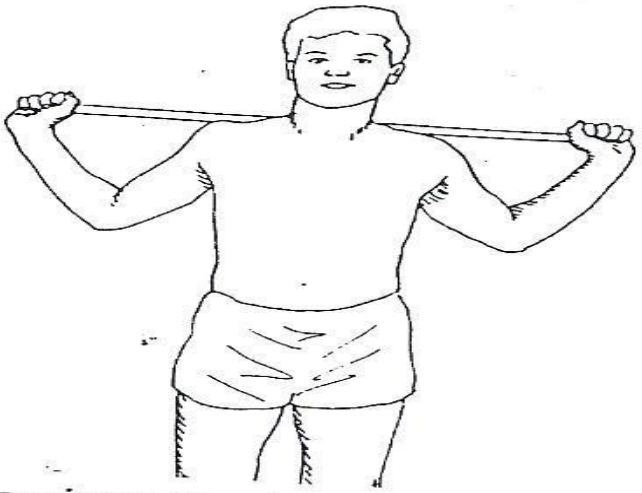
B. Procedure to ↑ ROM of Specific Structures

1. Cervical & upper thoracic region.

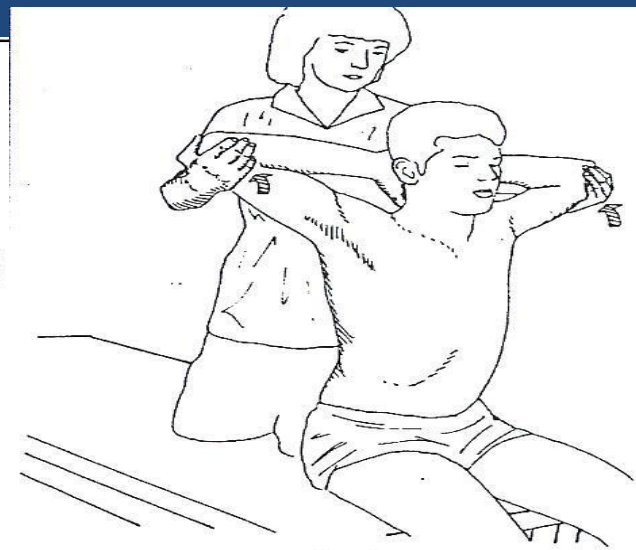
- ***↑ ROM of cervical spine & musculature.***

Stretch ant. portion of intercostals & ↑ ant. thoracic mobility.

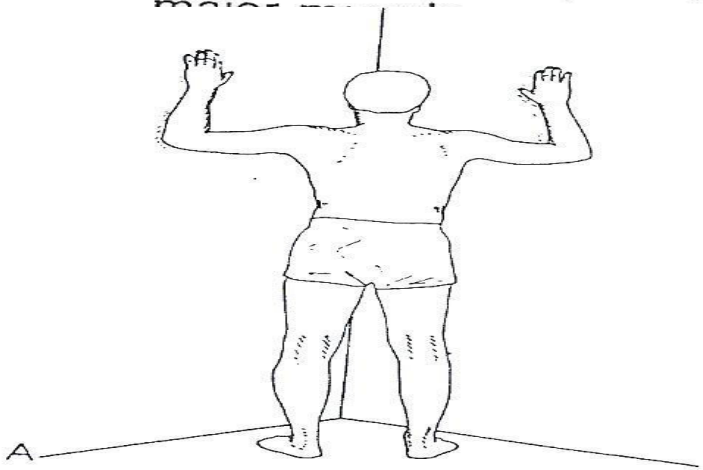




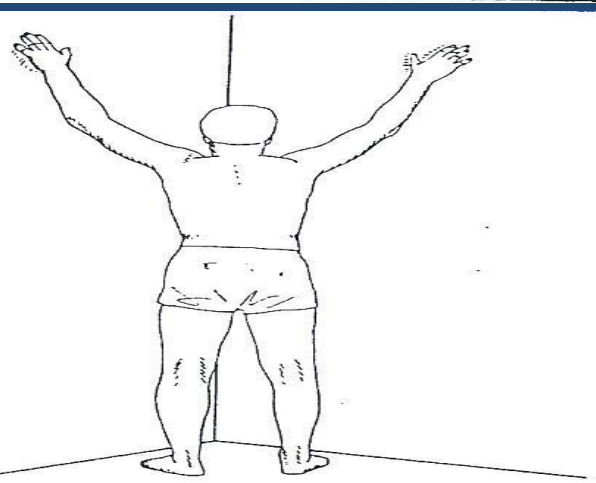
Wand exercises to stretch the pecto



Active stretching of the pectoralis major muscle. The therapist holds the elbows at the end-point as the patient breathes out.



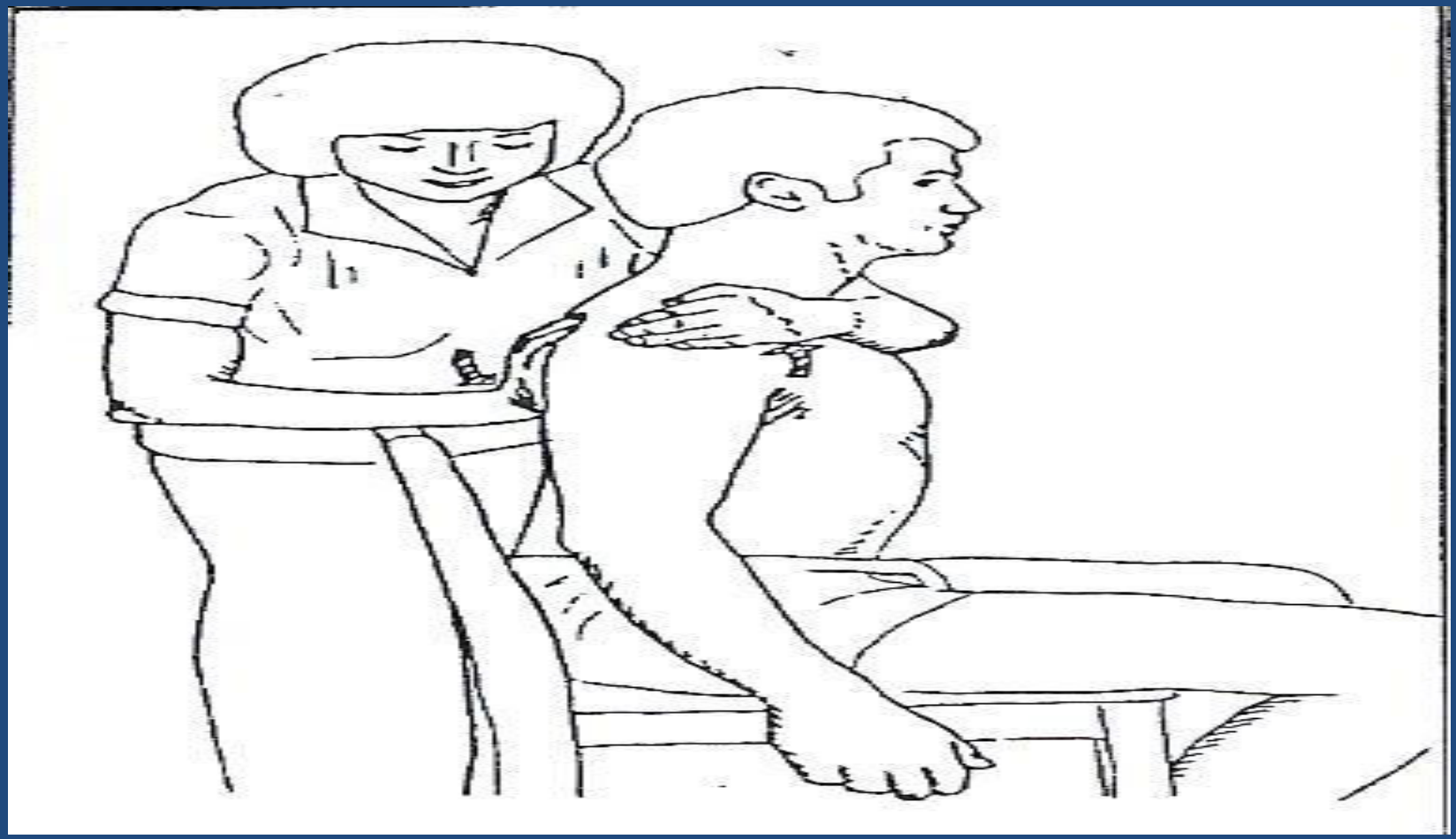
A



B

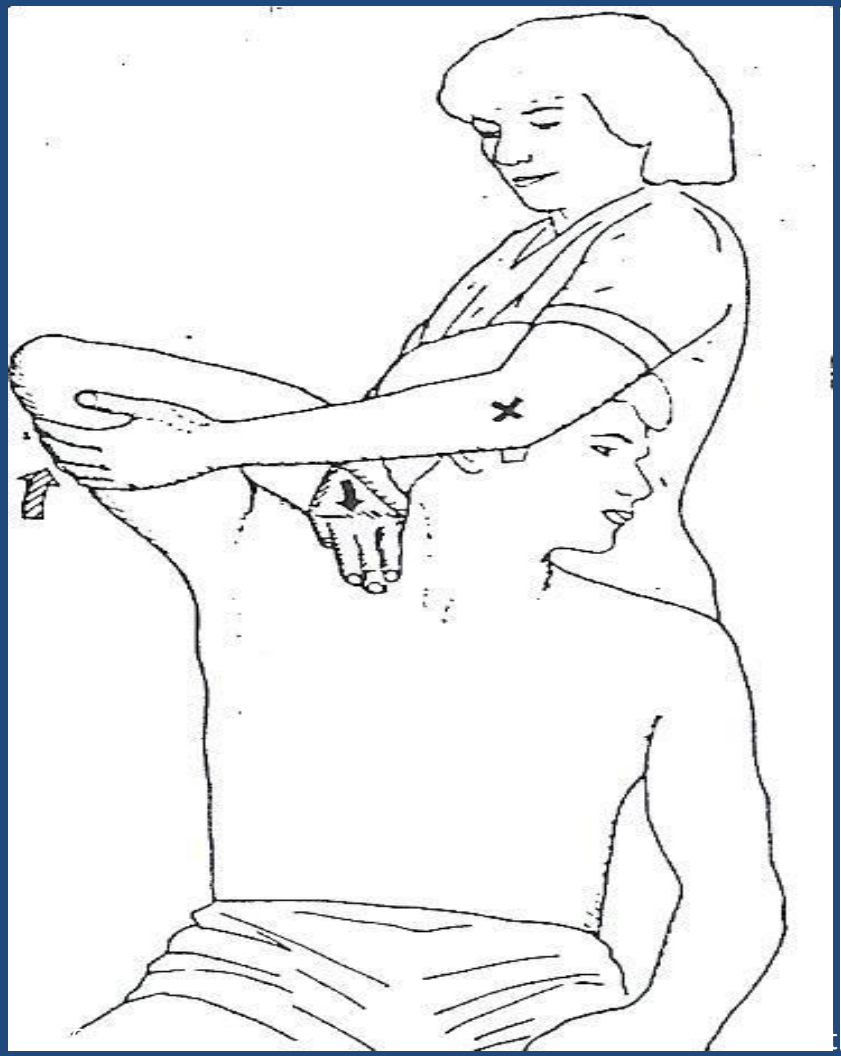
Self-stretching the pectoralis major muscle with the arms in a reverse T to stretch the clavicular portion (*A*), and in a V to stretch the sternal portion (*B*).

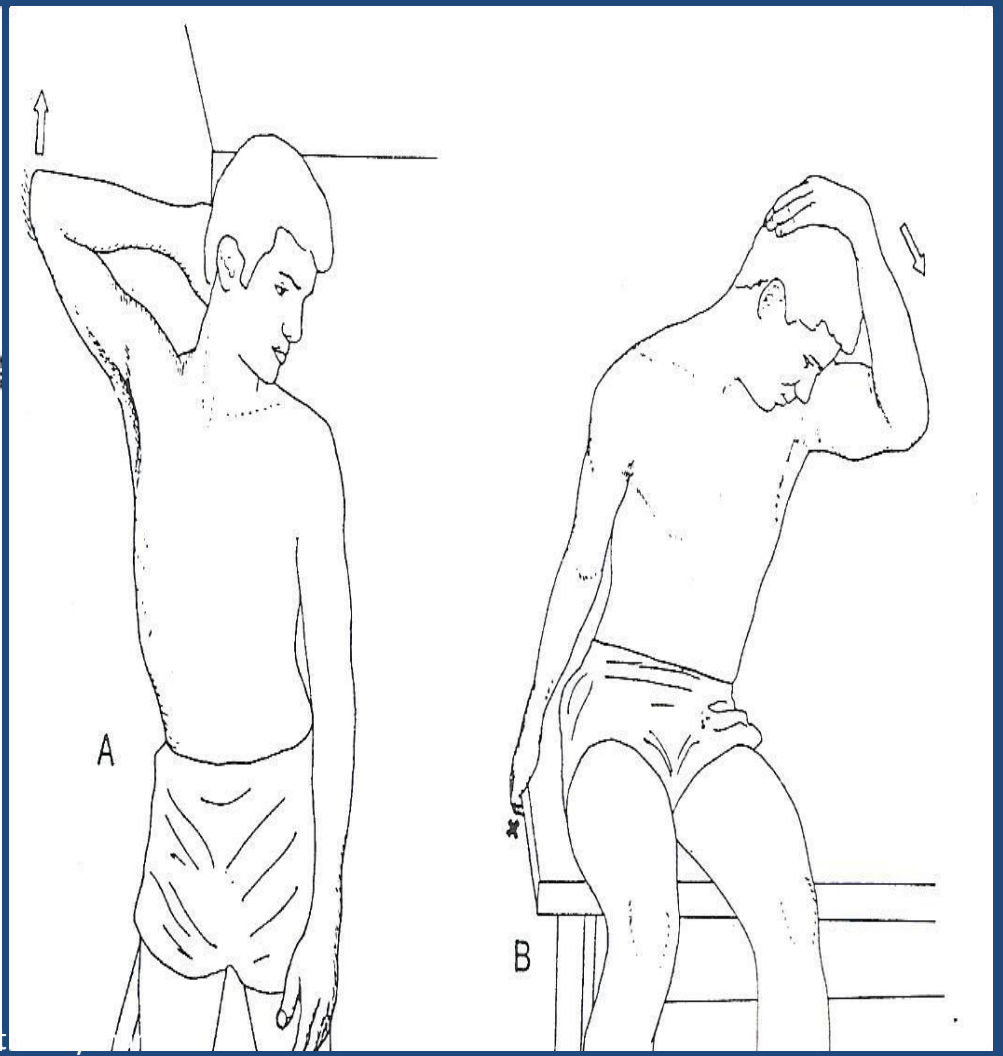
Stretch pectoralis minor m.



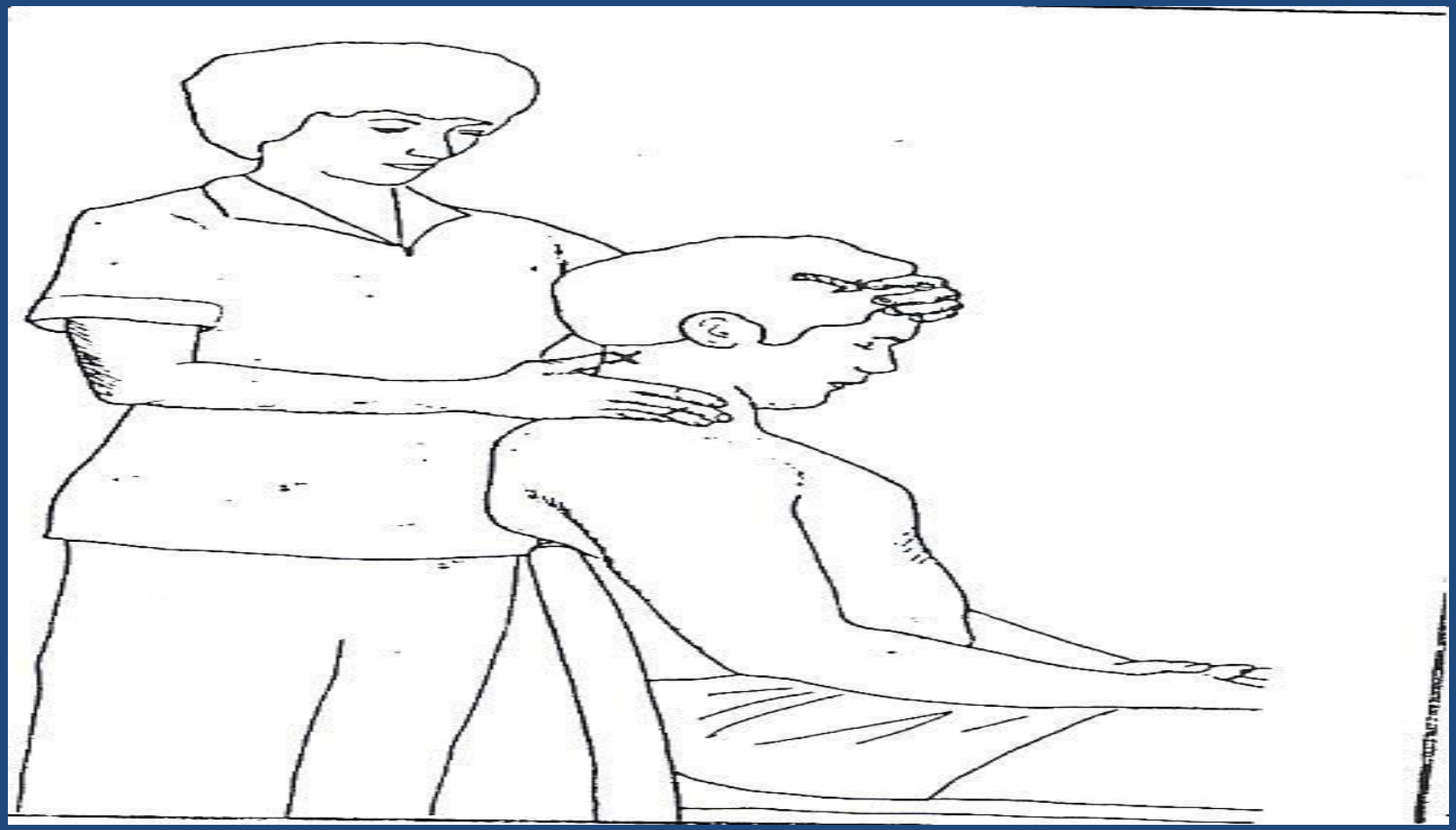
Stretch scalene ms.

Stretch levator scapula m.



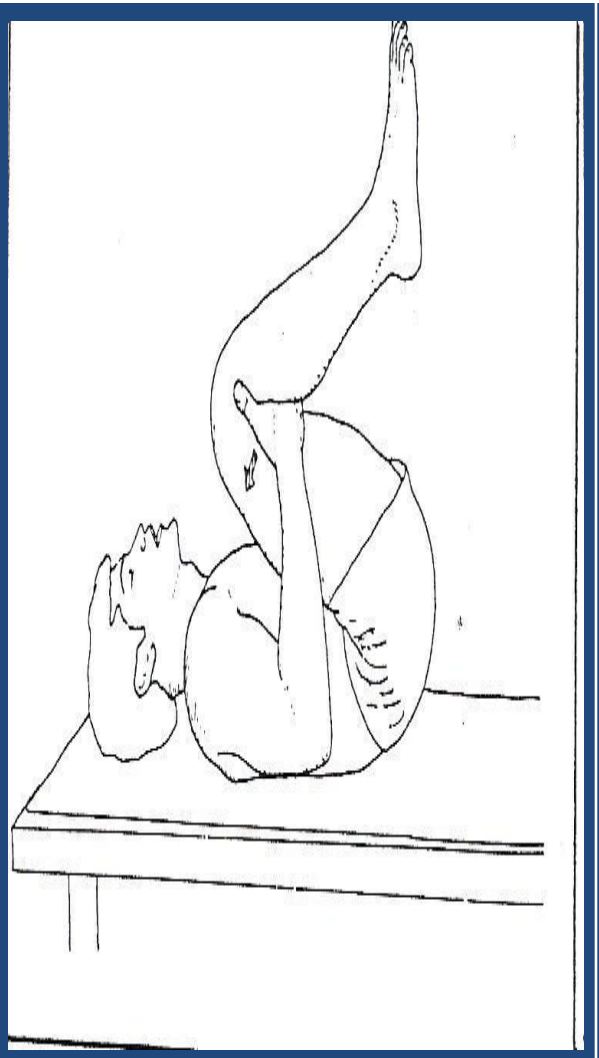


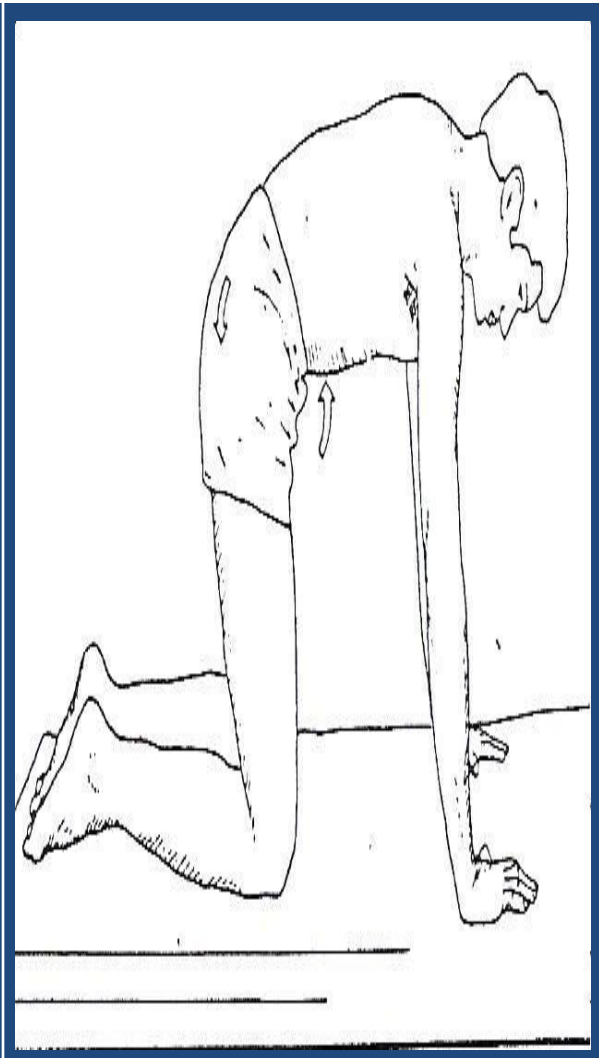
Stretch short suboccipital ms



2. Lumbar Region.

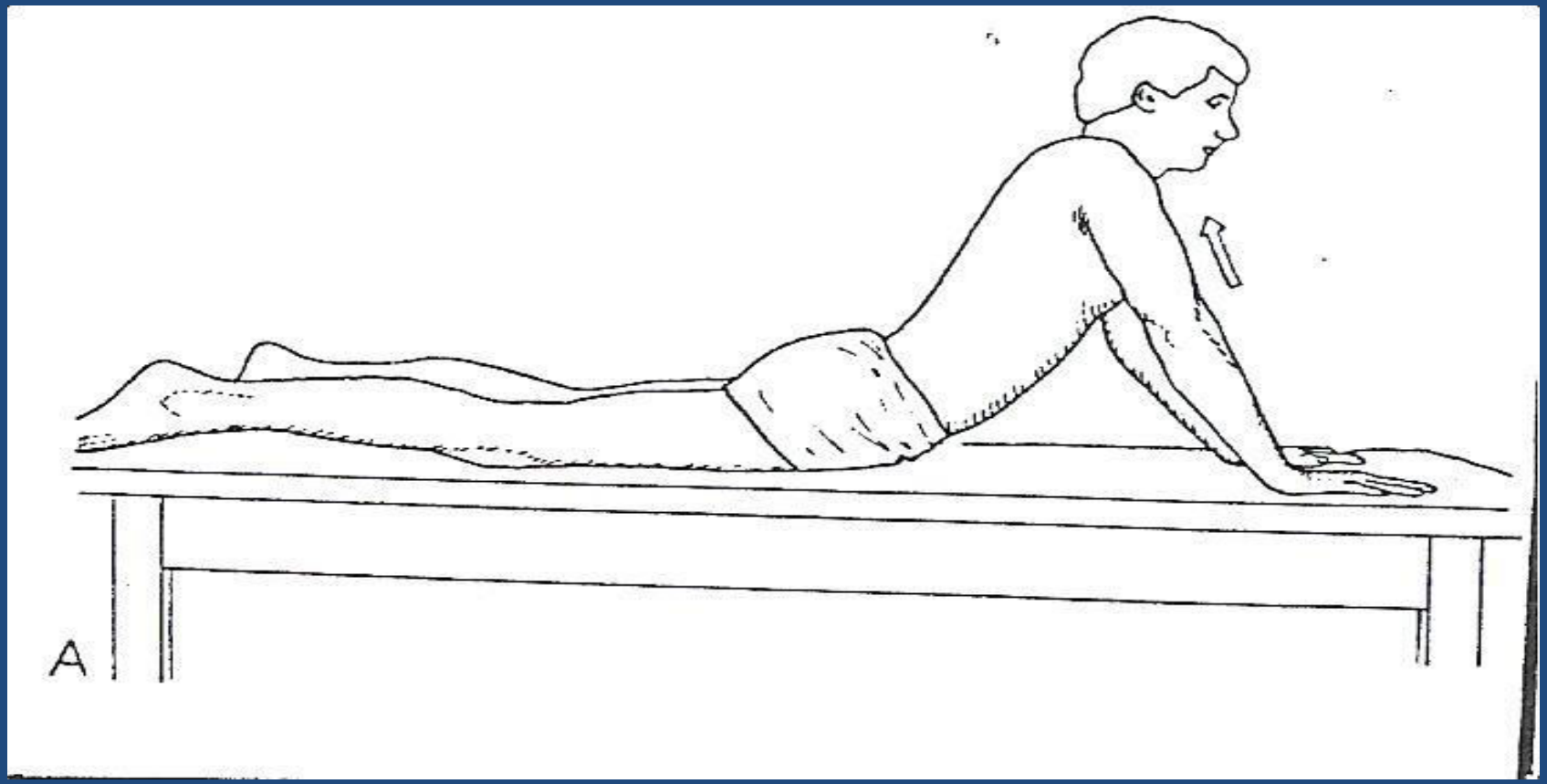
a. Stretch lumbar erector spinae & soft tissues post. to spine (to ↑ trunk flexion).



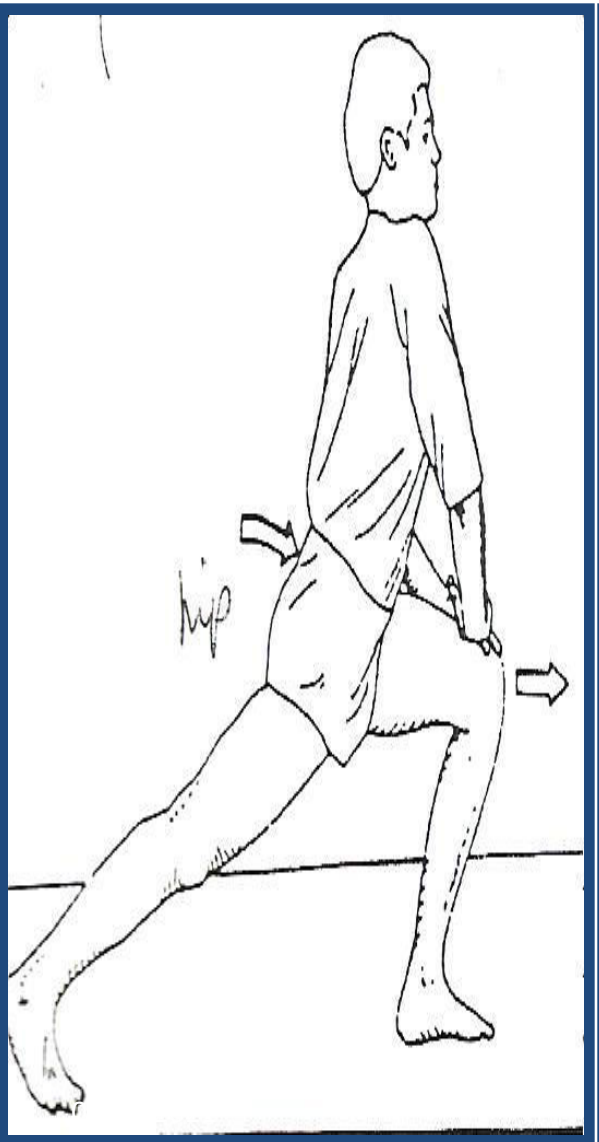


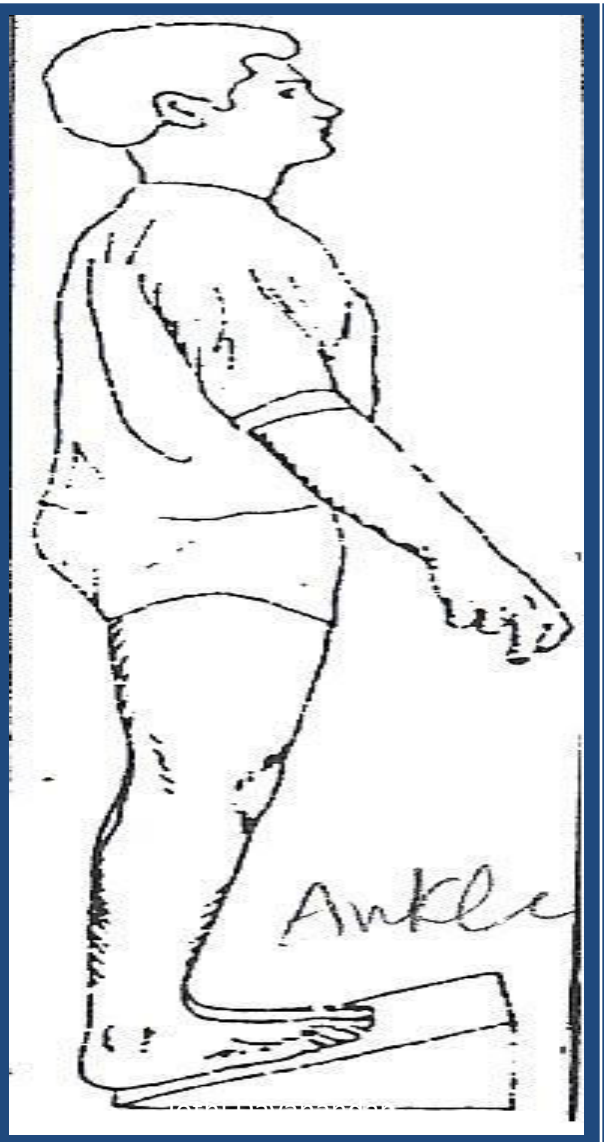
b. Stretch soft tissues ant to lumbar spine (to ↑ trunk extension).

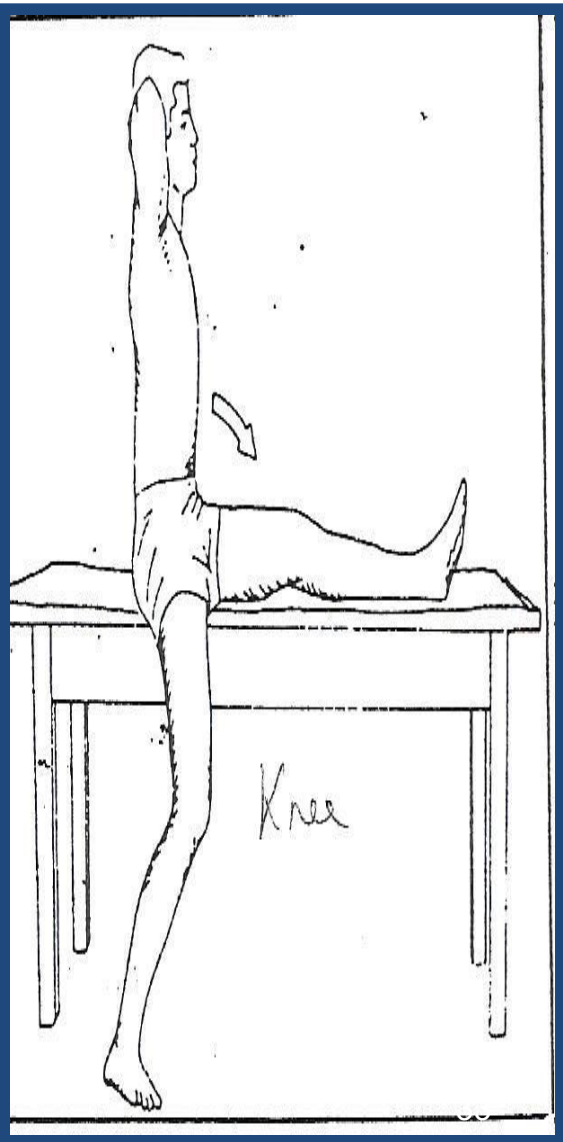
- www



. C Stretch tight affecting posture.



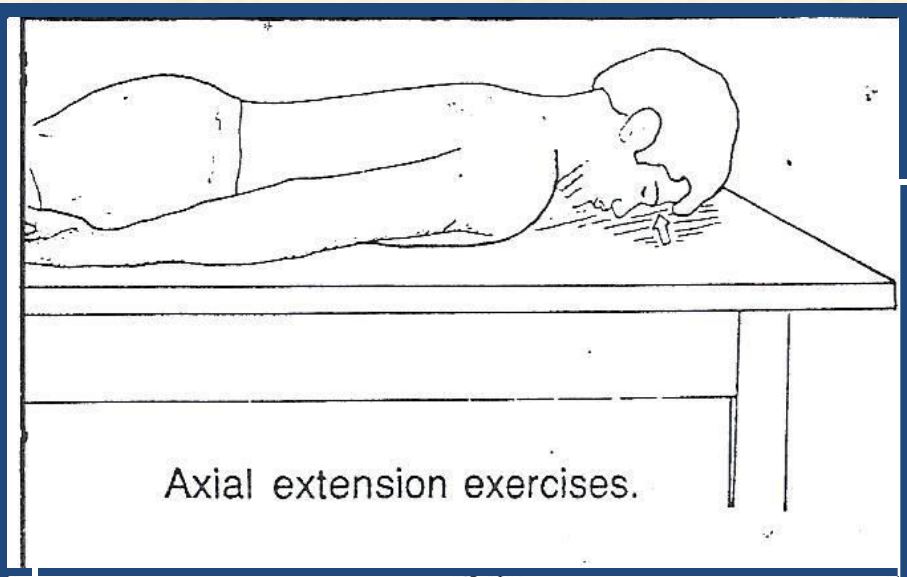




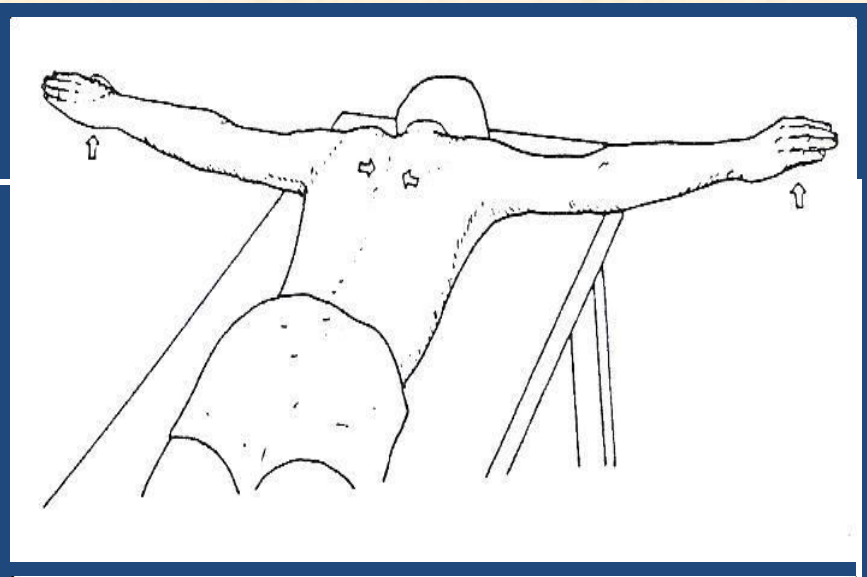
C. Procedures to Train & Strength M. Balance Necessary for Postural Control of Neck & Trunk

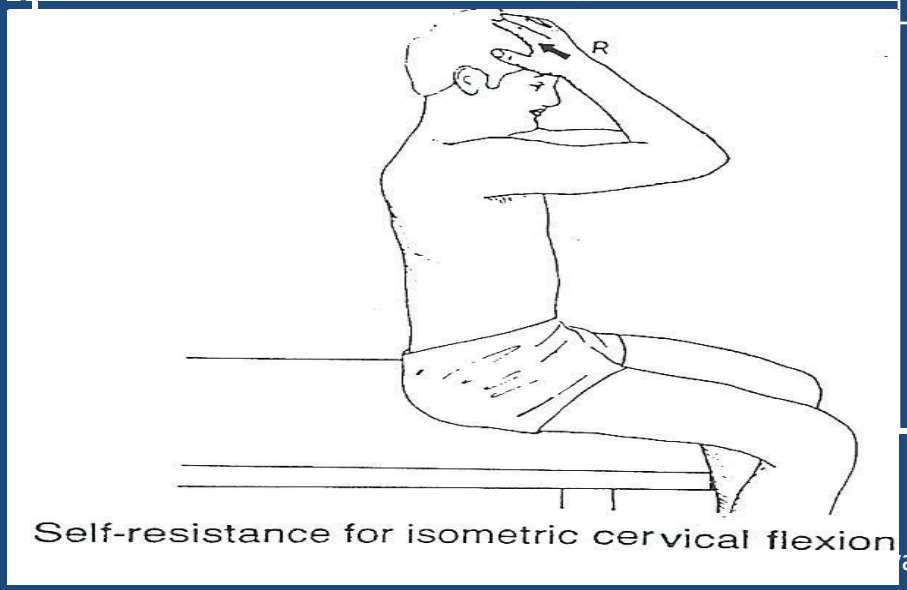
1. ***Cervical & upper thoracic region.***
   a. **Train & strength ms of axial extension.**
   b. **Train & strength ms of scapular adduction.**
   c. **Strengthen cervical ms.**
   d. **Self-resisted isometric cervical exs.**
   e. **Postural splints.**
2. ***Lumbar region.***
   a. **Strengthen abdominal ms.**
   b. **Strengthen lumbar extensor ms.**
3. **Strengthen LL ms affecting posture.**

Cervical & Upper Thoracic Region.

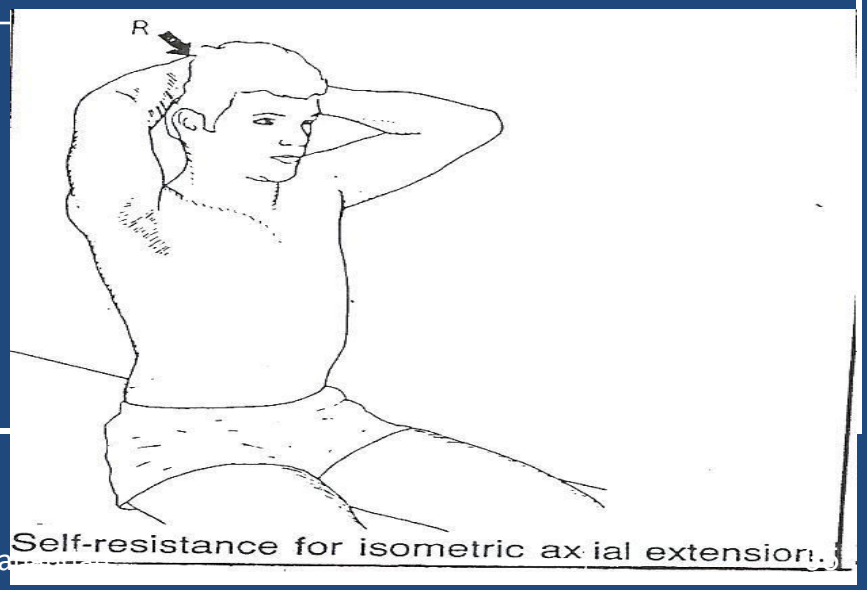


Axial extension exercises.



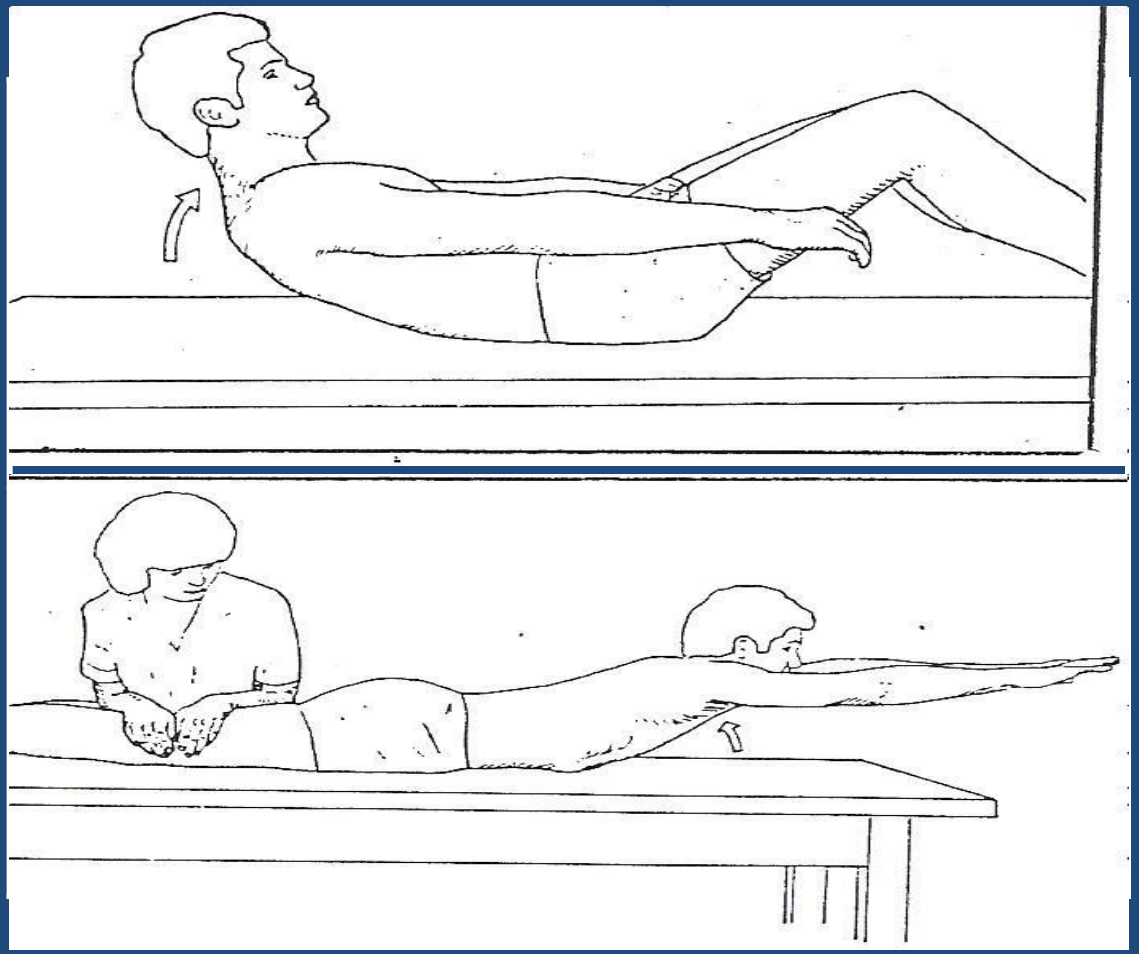


Self-resistance for isometric cervical flexion



Self-resistance for isometric axial extension

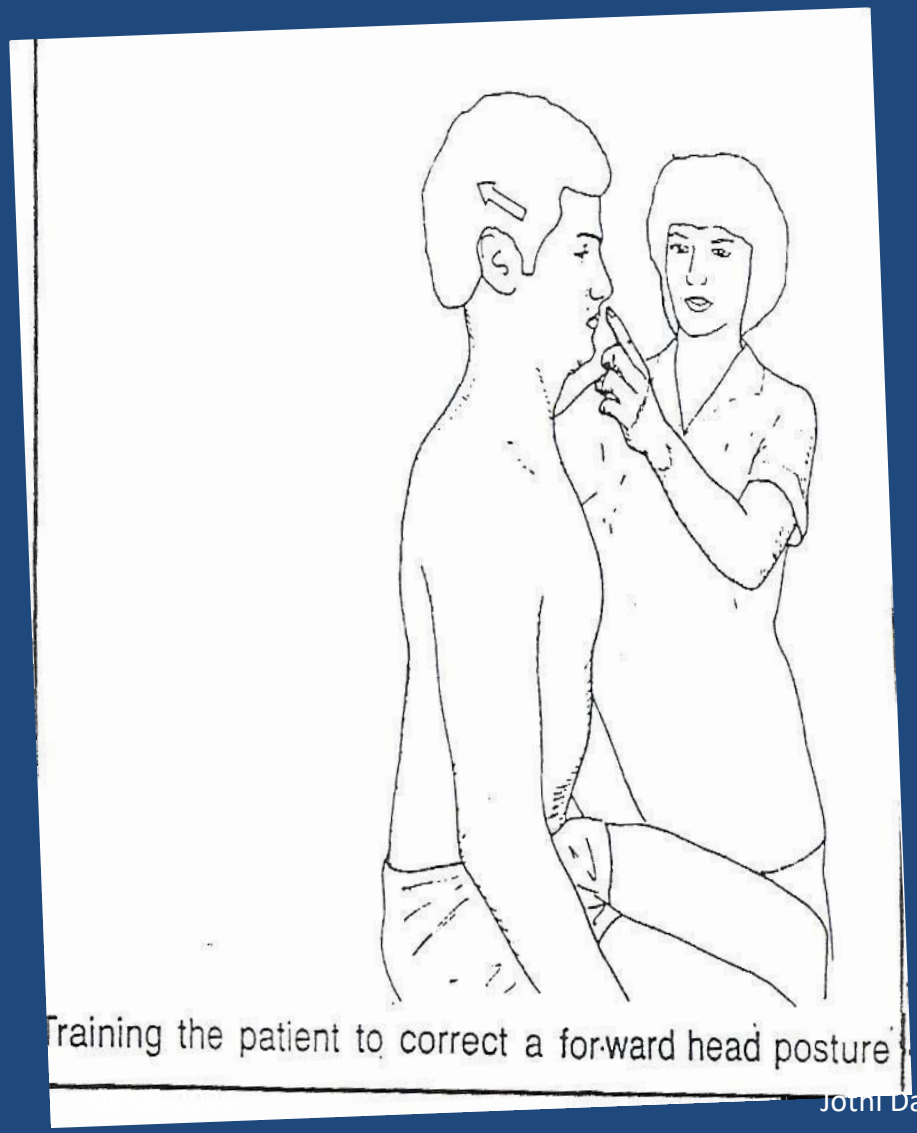
Lumbar Region.



D. **Procedures to Retrain Kinesthetic Awareness for Postural Correction**

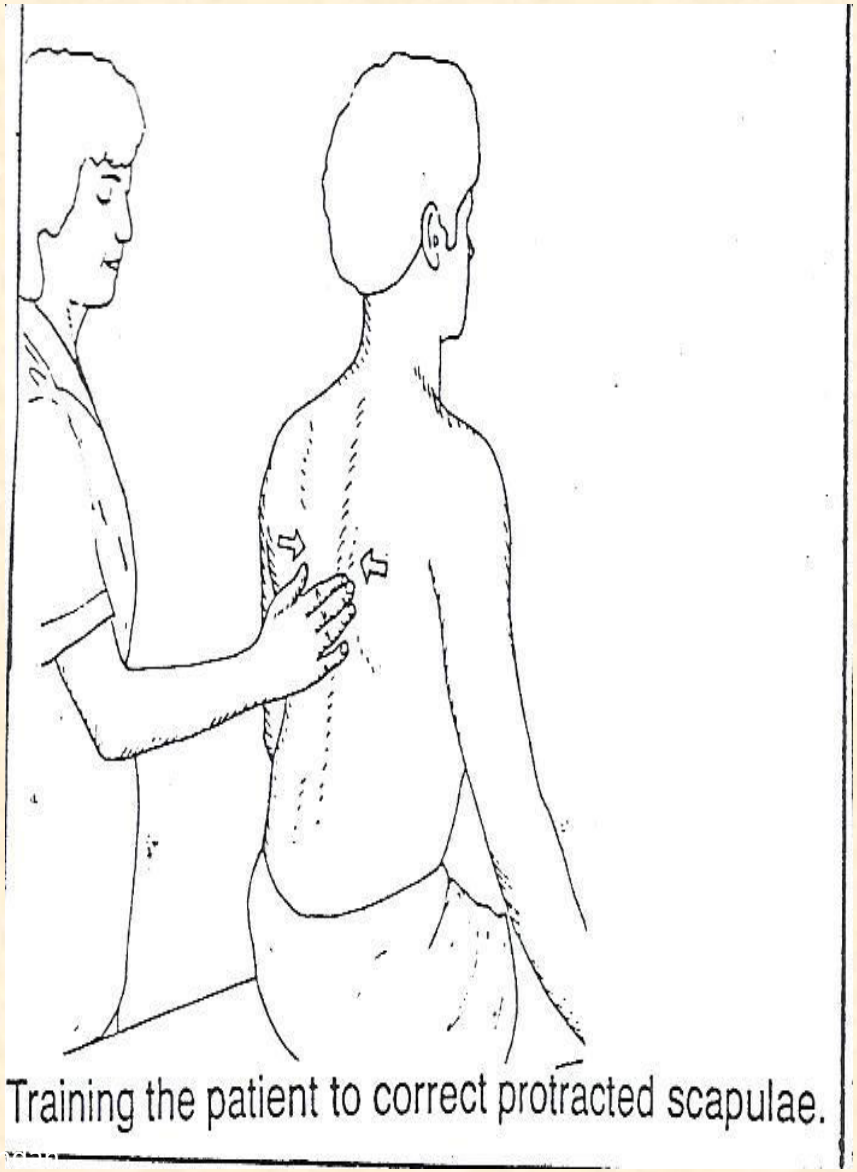
1. Improve pt. awareness.
2. Emphasize proper movements & balance by using verbal, tactile & visual reinforcement.
3. Teach proper movements & balance control.
   - Train axial ext →↓forward head posture.
   - Train scapular retraction
   - Train control of pelvic tilt & lumbar balance.
   - Train thorax control & thoracic spine control.
   - Train control of LL alignment.
4. Demonstrate the relation of faulty posture to the development of pain.
5. Reinforce learning.

Train axial ext →↓forward head posture.



Training the patient to correct a forward head posture

- **Train scapular retraction**

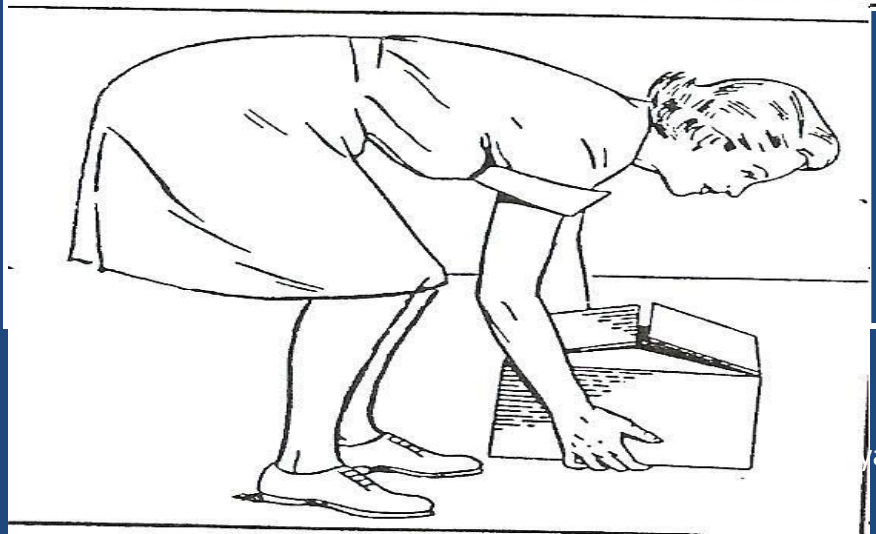


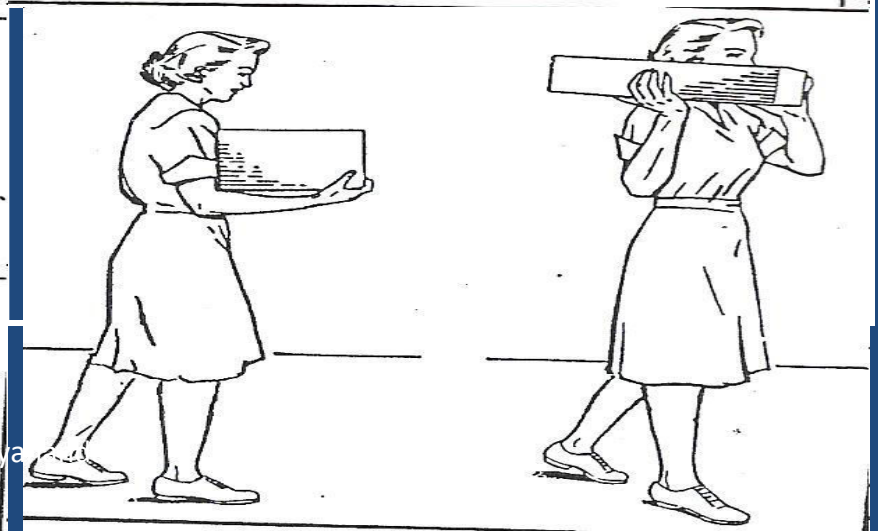
Training the patient to correct protracted scapulae.

E. Procedure to Teach Management of Posture to Avoid Problem Recurrence.

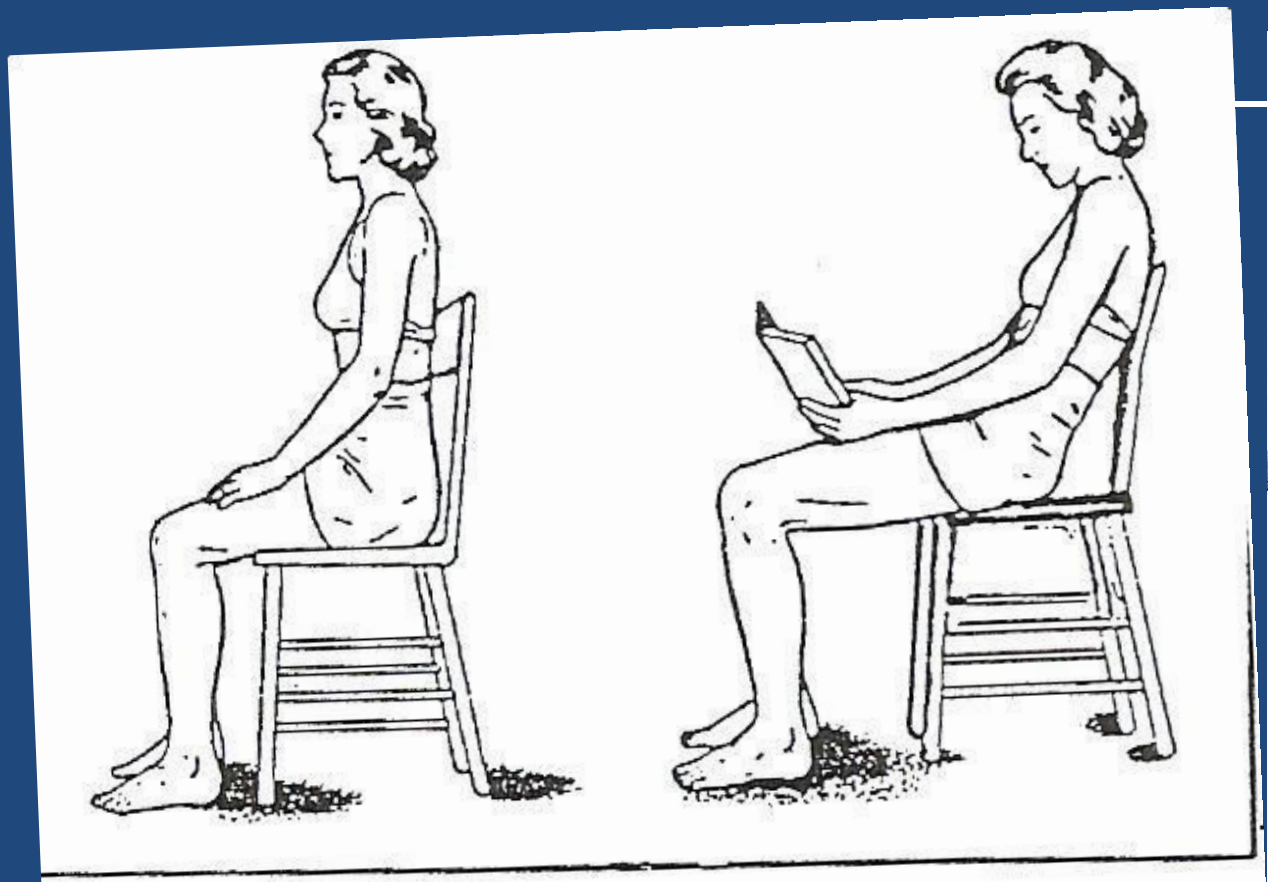
1. Teach body mechanics in lifting, stooping & carrying.
2. Preventive exs. & mechanics for relief of mechanical stress in ADL.
3. Recognize environmental factors influencing posture.

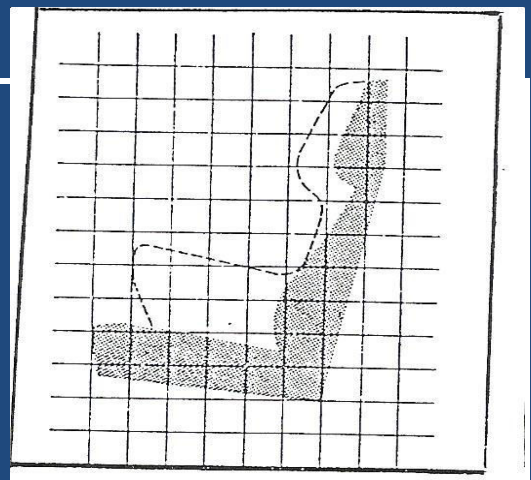
Teach Body Mechanics in Lifting, Stooping & Carrying.

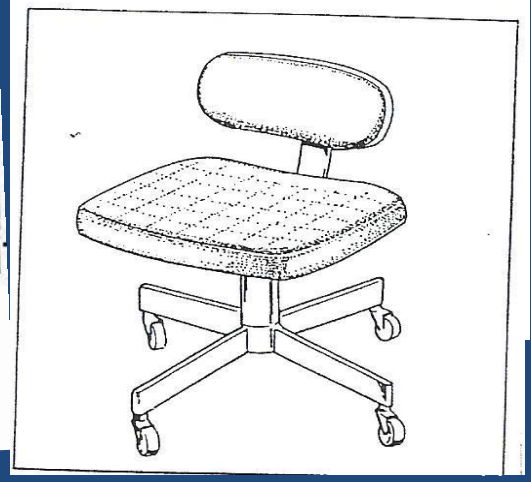




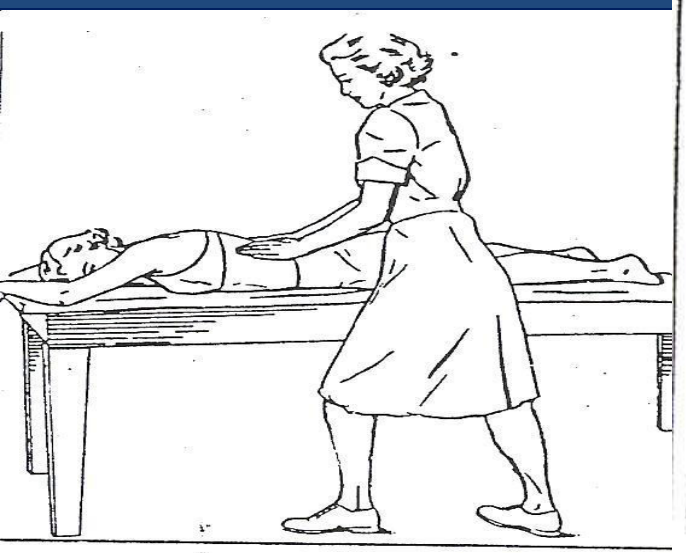
Recognize Environmental Factors Influencing Posture.

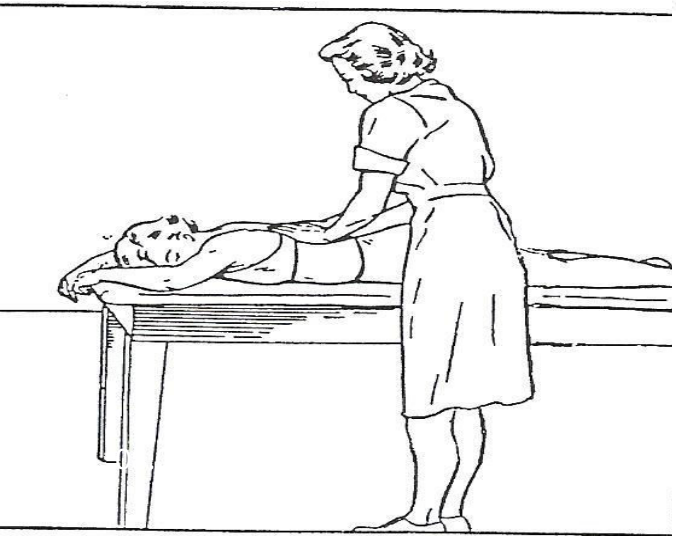






In Activity





Factors Maintaining Posture

1. **Inert structures supporting the body posture**
   a. Ligaments
   b. Fascia
   c. Bones
   d. Joints
2. **Dynamic structures maintaining body posture**
   a. Muscles
   b. Tendinous attachments

THANK YOU