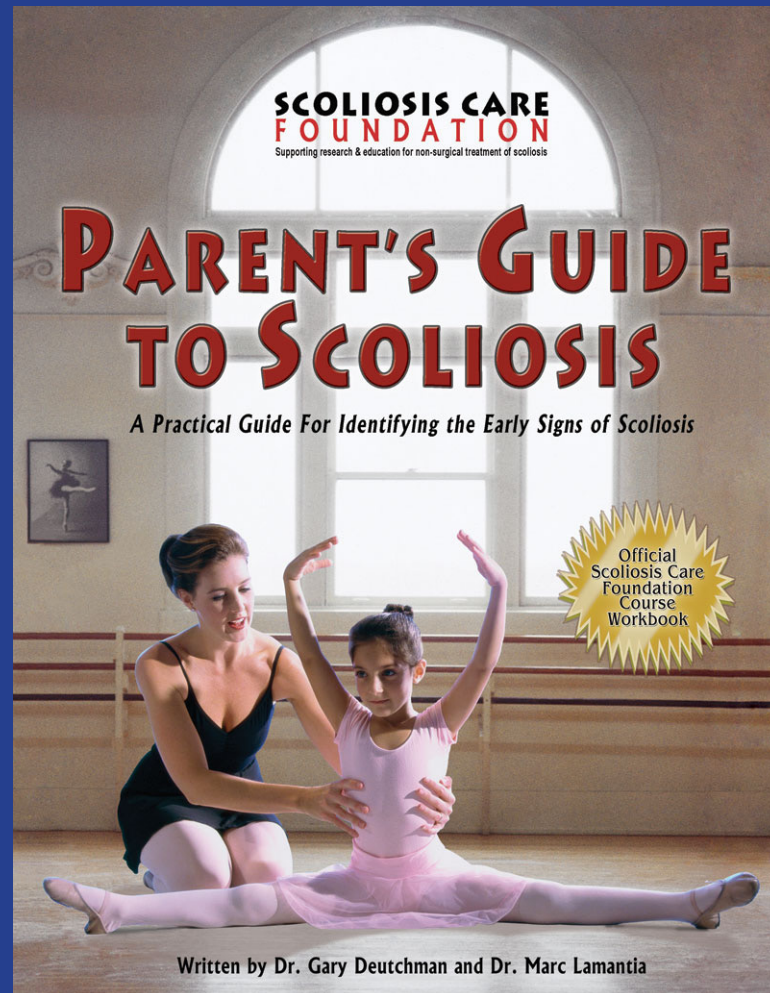


Welcome to the Scoliosis Awareness Program



Agenda

- ✦ Causes, consequences and management of Abnormal Spinal Curvature
- ✦ Forward-Bend Test -
Discussion and demonstration
- ✦ Group participation

Becoming A Great Observer

- ✦ This program is designed to give you the tools necessary to identify signs of scoliosis at the earliest possible stages.
- ✦ Observations of posture and how posture changes can be valuable in the early detection of the disease.



What You Will Learn

- ♦ What is Scoliosis?
- ♦ Why is it important to detect it early-on?
- ♦ Who gets Scoliosis?
- ♦ How can Scoliosis be detected?
- ♦ What to do if you find it.



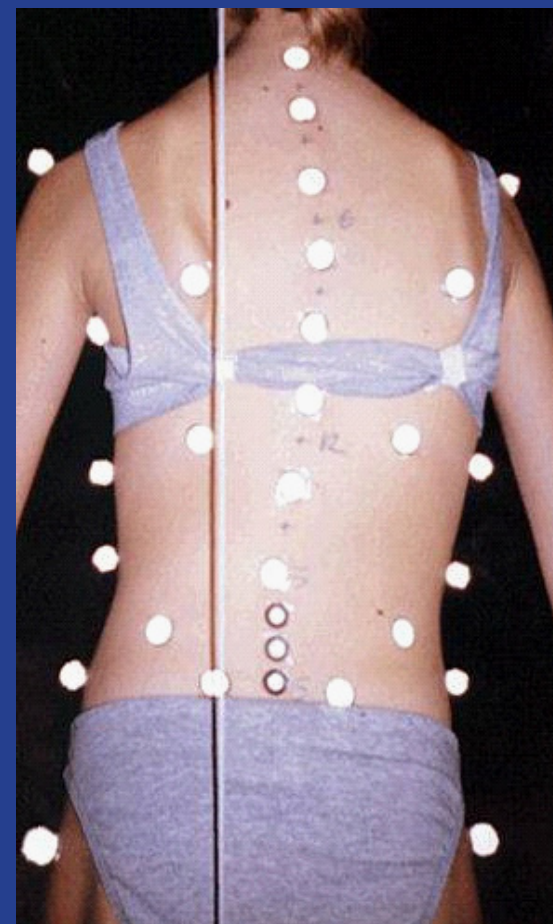
What Is Scoliosis?

- ✦ A disorder that manifests as a curvature of the spine and associated deformity of the rib cage.
- ✦ It usually develops around puberty, and is found most often in females.

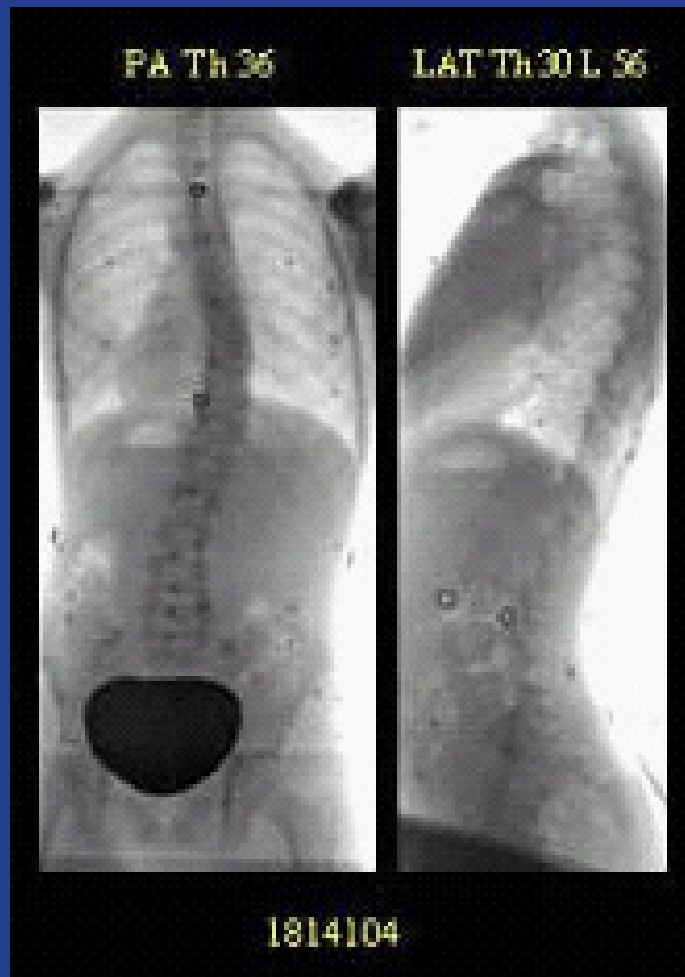


Why Is Finding Scoliosis In The Early Stages Important?

- ✦ Early identification of the disease and early referral can lead to non-surgical management.
- ✦ The signs of the disease can be recognized if you are familiar with its various presentations.



Early Detection Means Correction



Untreated Scoliosis Can Be Progressive

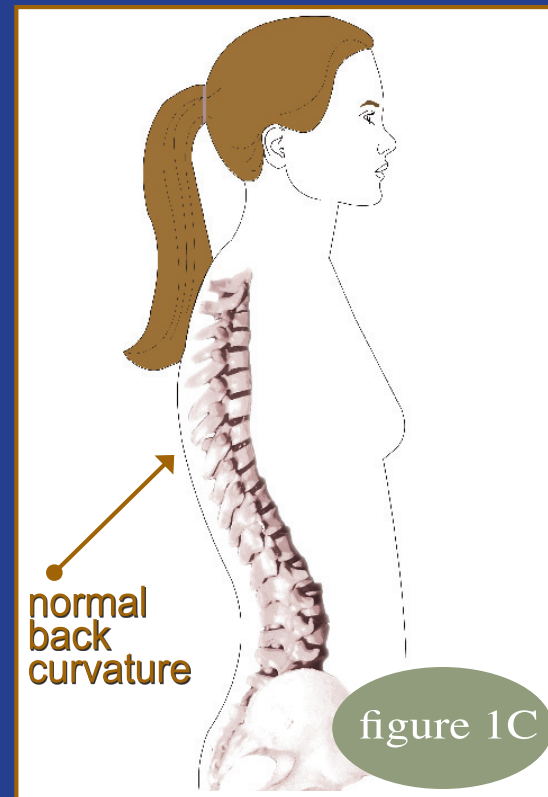
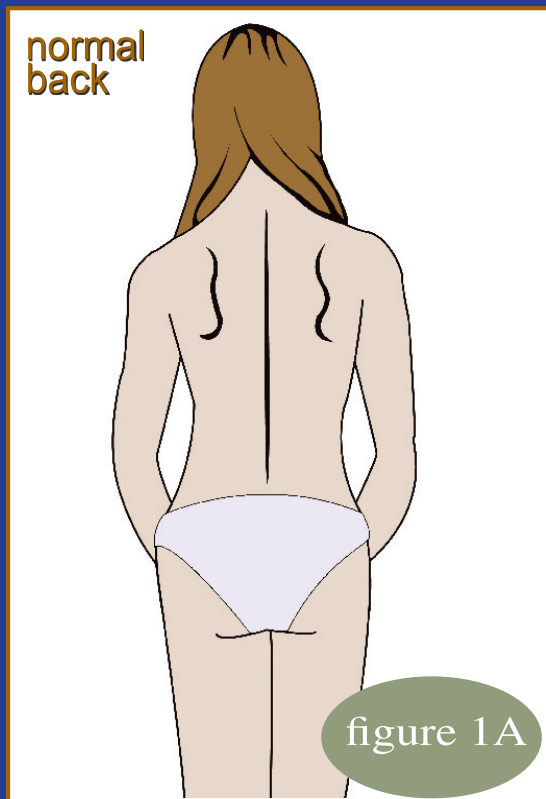


Who Gets Scoliosis?

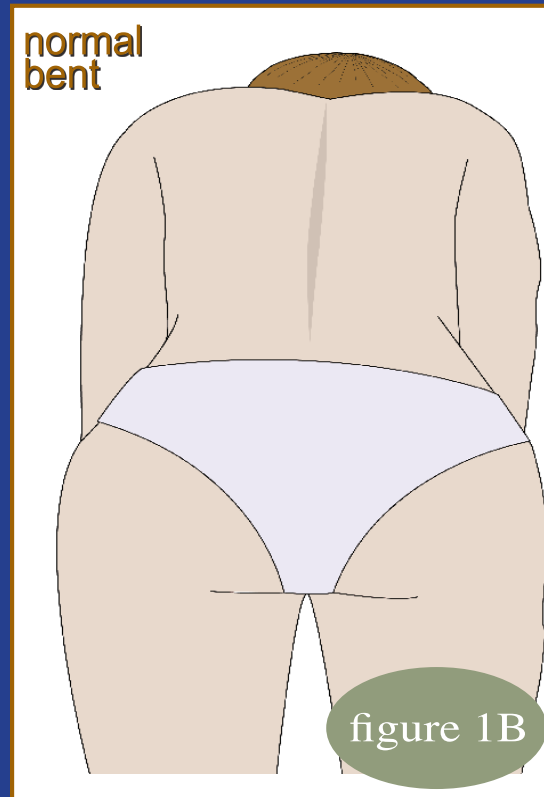
- ◆ Females are 10 times more likely to develop scoliosis.
- ◆ Ages can vary, although the majority of the cases develop between the ages of 10 and 16.
- ◆ Scoliosis runs in families (30% more likely in offspring of those affected).
- ◆ Dancers and Rhythmic gymnasts are 20 times more likely to develop progressive scoliosis (as per recent published studies).



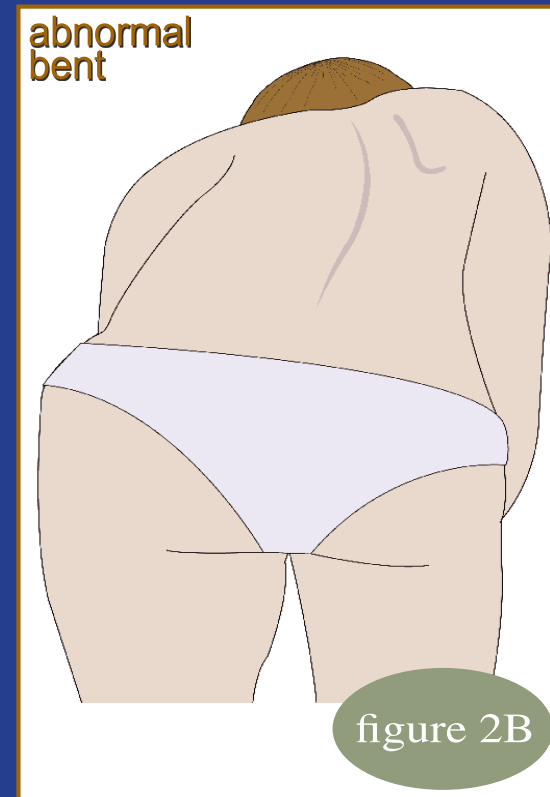
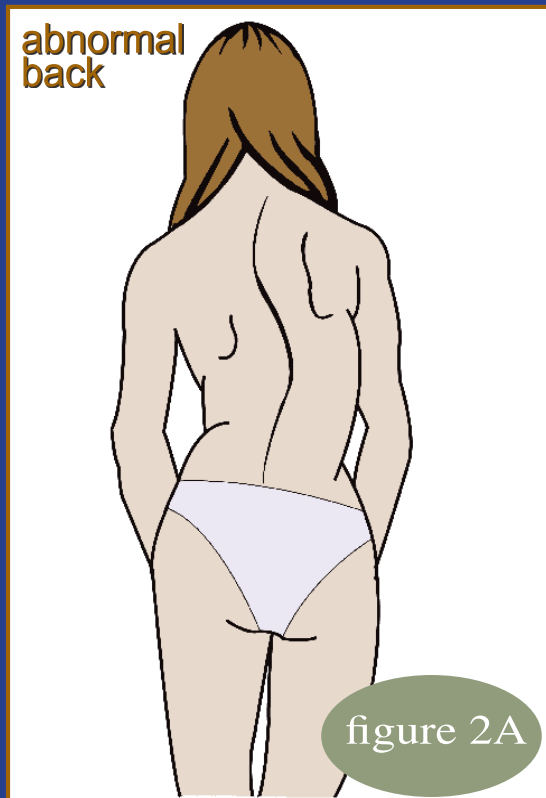
Normal Spine



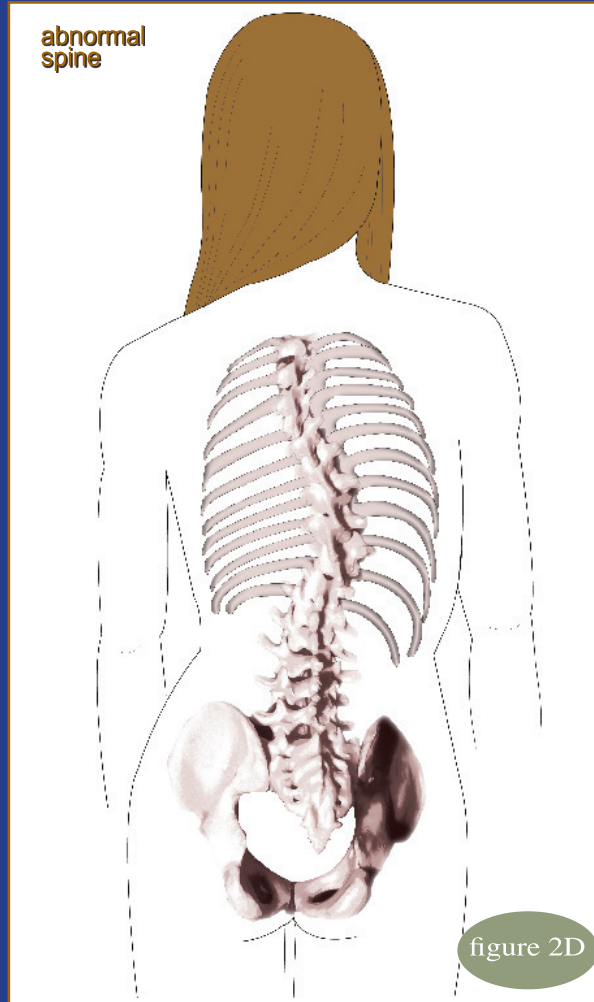
Normal View On Bending: *Adams Foreward Bend Test*



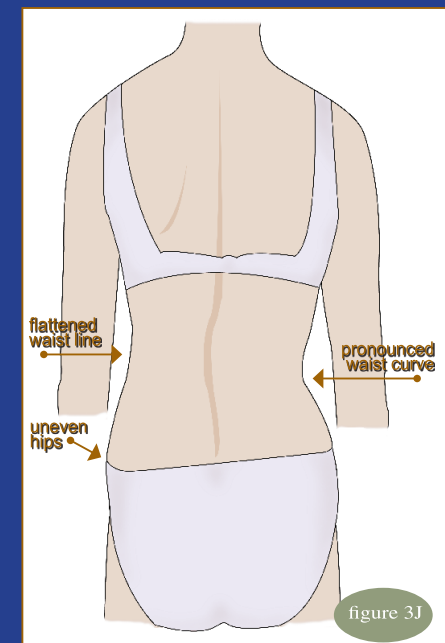
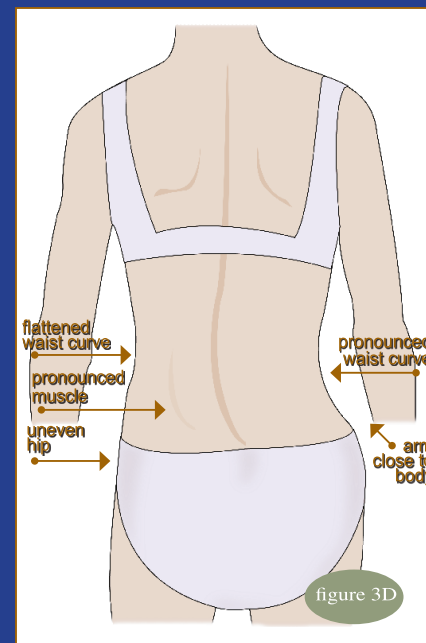
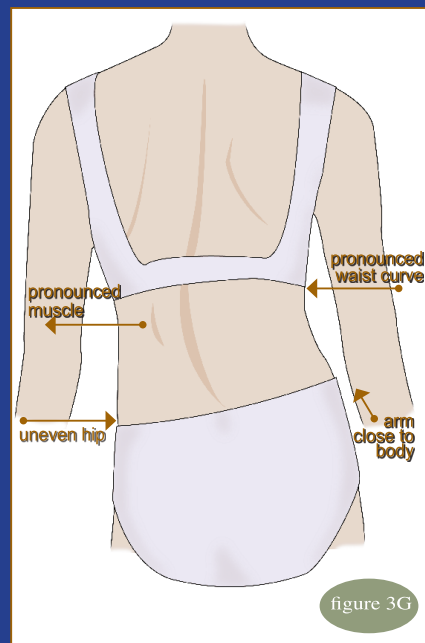
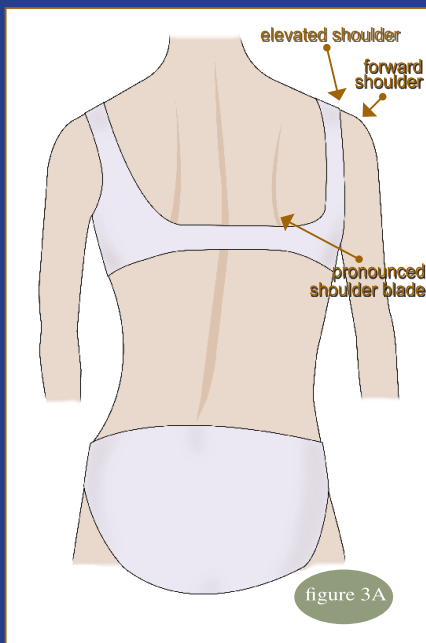
What Do You See?



Take A Look Inside



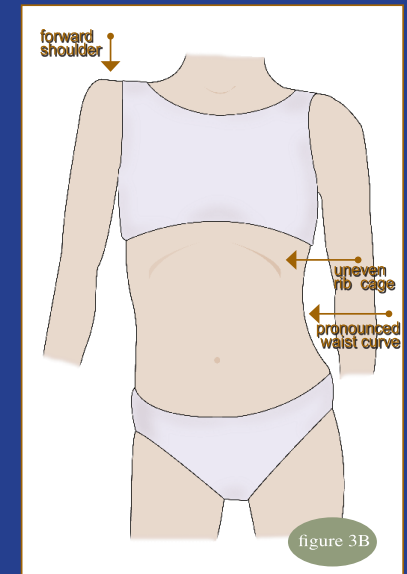
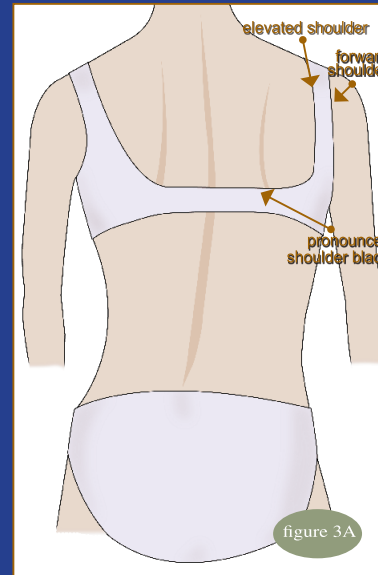
4 Major Patterns To Look For In The Posture



Right Thoracic: The Most Common Pattern

Right Thoracic

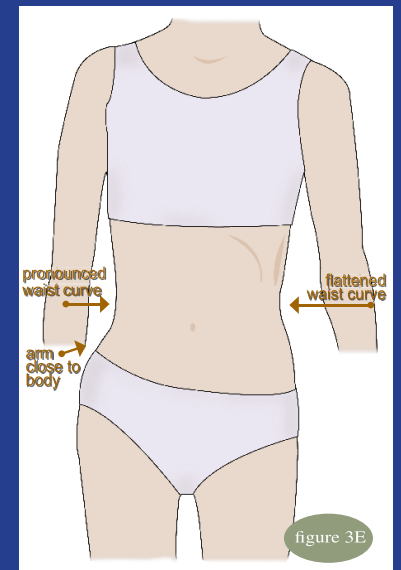
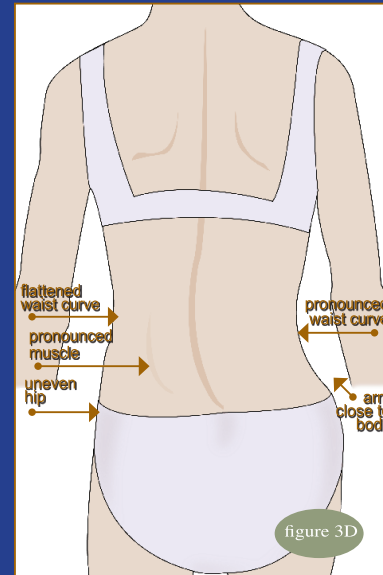
- ✦ The right thoracic curvature pattern is the most common found in idiopathic scoliosis.
- ✦ It can be identified by the hallmark right sided rib hump, and often includes an elevated right shoulder with forward rounding.
- ✦ A left lower back muscle prominence may also be present in this type, although it is not always the case.
- ✦ The center of gravity is shifted to the child's right. When viewing from behind, the right scapula may appear winged and elevated from the rib cage.



Left Lumbar Curvature

Left Lumbar

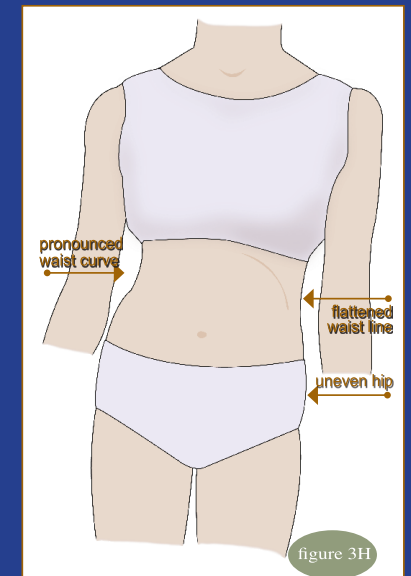
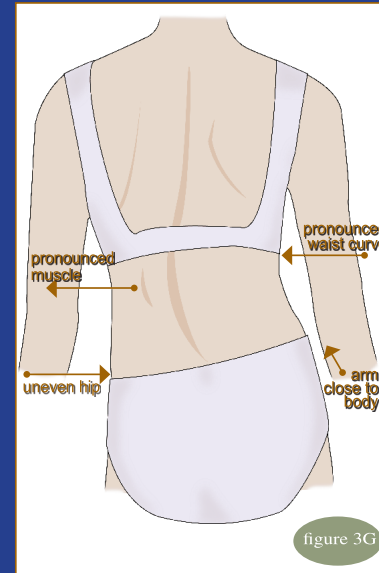
- ♦ The left lumbar pattern is also quite common. The most common postural disorganization includes a lower hip on the child's left side. The waste angle is closed on the right and open of the left. The center of gravity is often shifted to the child's left.



Left Thoracolumbar

Left Thoracolumbar

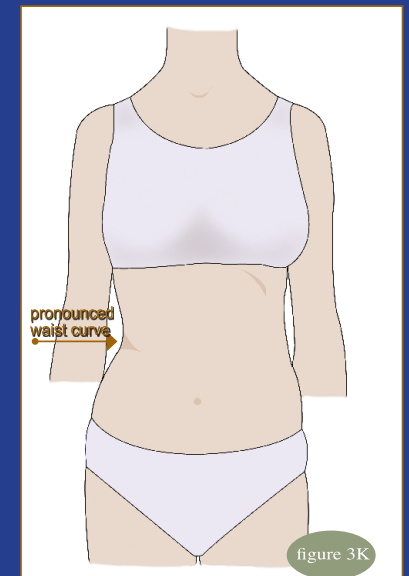
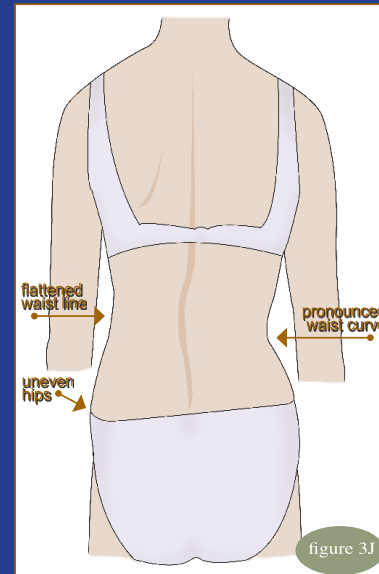
- ✦ This type of curvature is accompanied by a left sided muscle prominence and may look similar to a left thoracic curvature when the rib cage is involved.



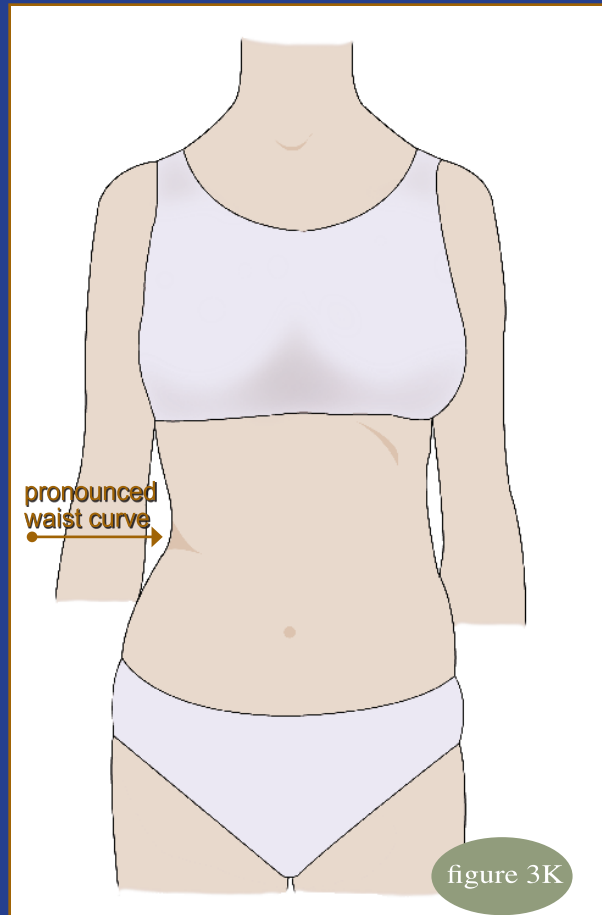
Right Thoracic / Left Thoracolumbar

Right Thoracic Left Lumbar

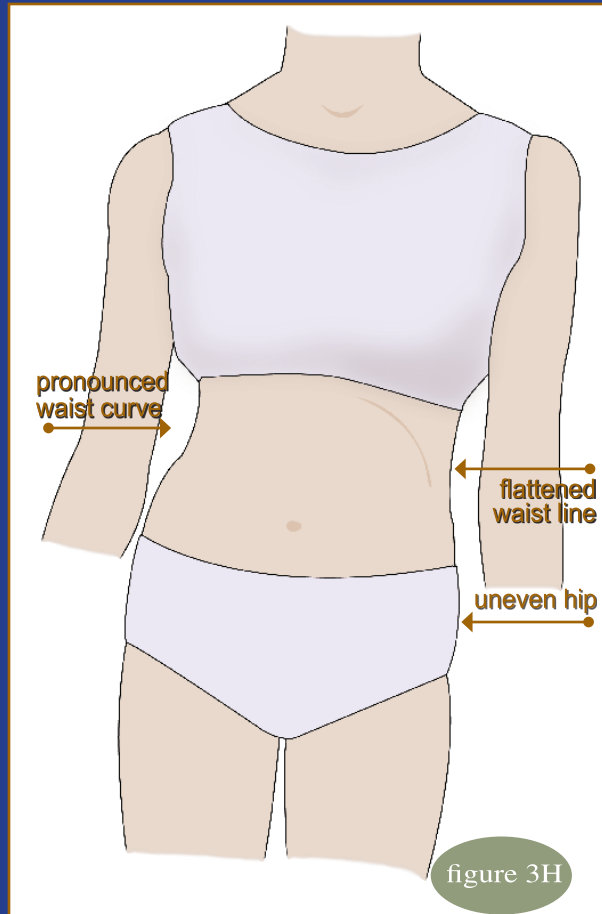
- ♦ The double major curvatures may be undetectable due to the relative balancing of the posture. A pronounced waist curve on the right may be evident. The left hip may also appear slightly lower.



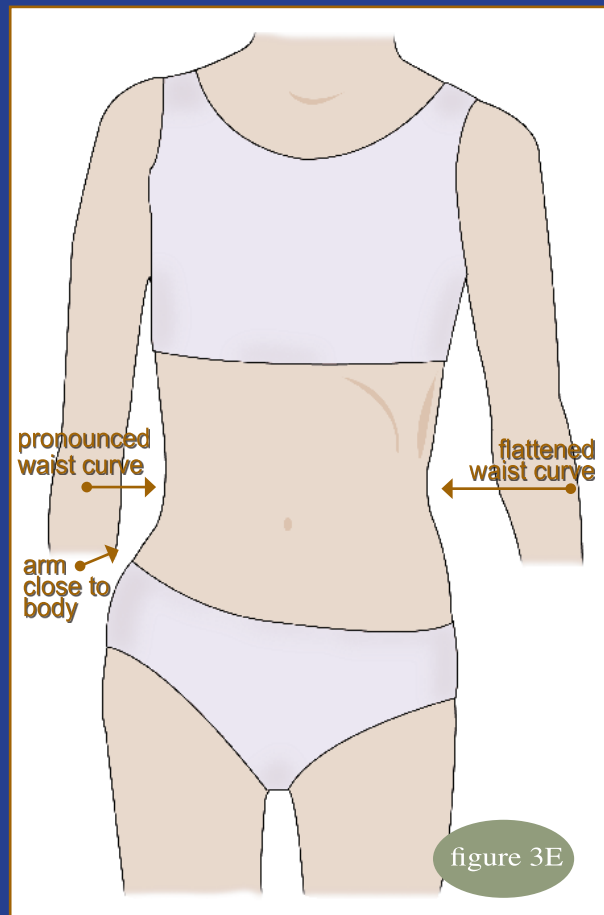
Can You Identify This Pattern?



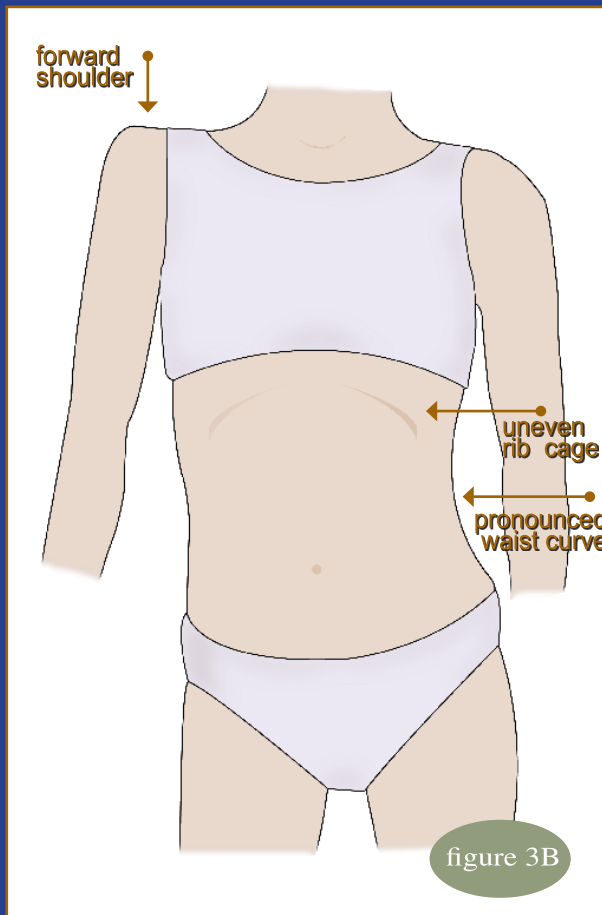
Can You Identify This Pattern?



Can You Identify This Pattern?



Can You Identify This Pattern?



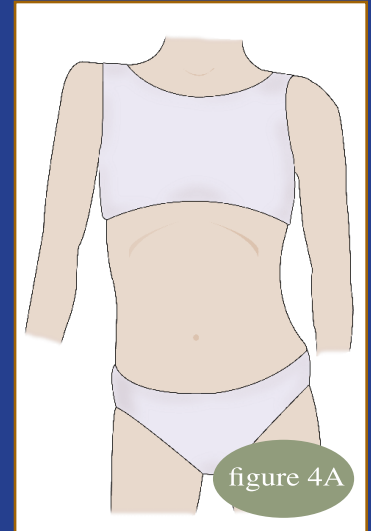
The Screening Process

(see pages 10-11 in the Guide)

STEP 1

With the child facing forward in the standing position, the examiner checks for the following signs of a possible abnormal spinal curvature:

- ♦ One shoulder higher than the other
- ♦ Larger space from arm to the side of the body (compare both sides)
- ♦ Uneven waist creases
- ♦ Uneven hip levels

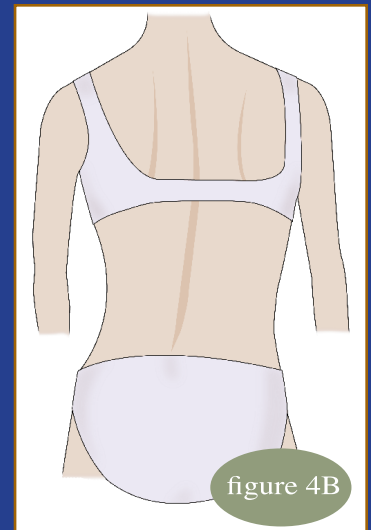


STEP 2

View the child from the back in the standing position and note any of the following:

- ♦ Uneven contours, humps on one side
- ♦ Any curve in the spine

If the hips appear uneven, but no other abnormalities are noted, consider possibility of unequal leg lengths, and visualize alignment of the knee creases if possible.



Pair Off In Groups Of Two

(practice screening each other)

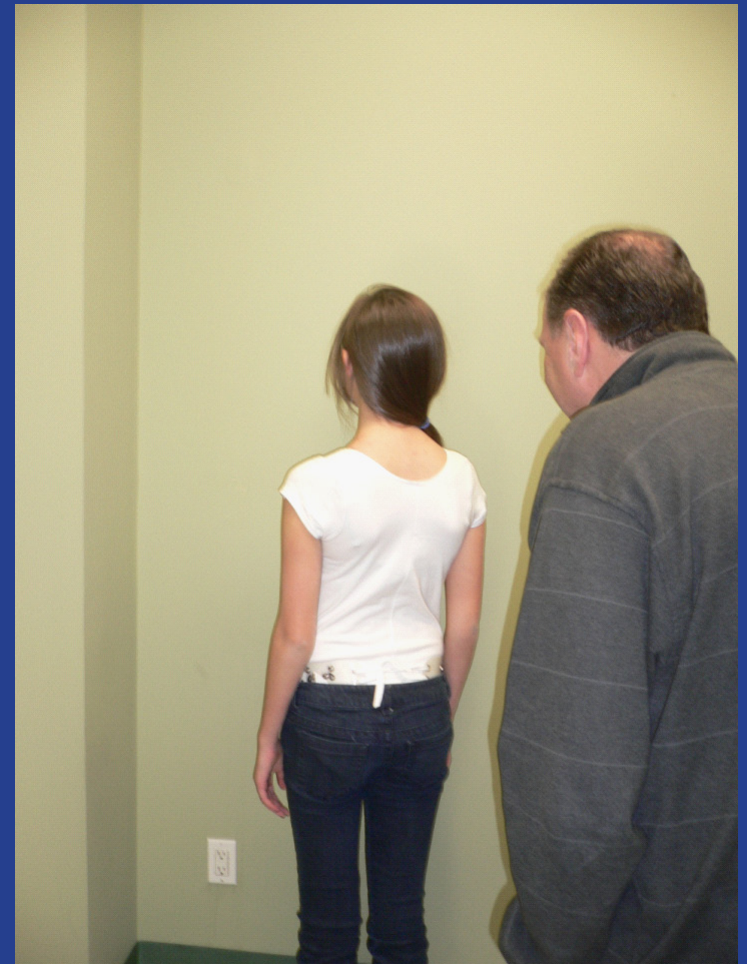
'Patient' and Screener should stand 5-8 ft. apart.

Screener should observe:

- ♦ Shoulders
- ♦ Shoulder Blades
- ♦ Waist angle
- ♦ Hip heights

How Scoliosis Can Be Detected

- ✦ Best method is an X-ray of the full spine.
- ✦ However, postural observations, such as those performed during a “spinal screening”, are the first line of detection.
- ✦ The Adams Test -- the traditional standard -- is not the only initial means of detection, as you now know.



Adams Forward Bend Test

- ♦ Ask the child to clasp their hands and place them between the knees as they bend forward at the waist.



Using A Scoliometer

- ✦ Place the scoliometer gently across the child's back at the point where a hump or unevenness is most prominent.
- ✦ The number "0" should be directly over the top ridge of the spine.
- ✦ Do not press down on the device as that can distort the reading.
- ✦ Re-evaluation is recommended for children with a reading of 5 degrees or more.
- ✦ When a reading of 5 - 7 degrees is reproduced, a referral should be made to a professional.

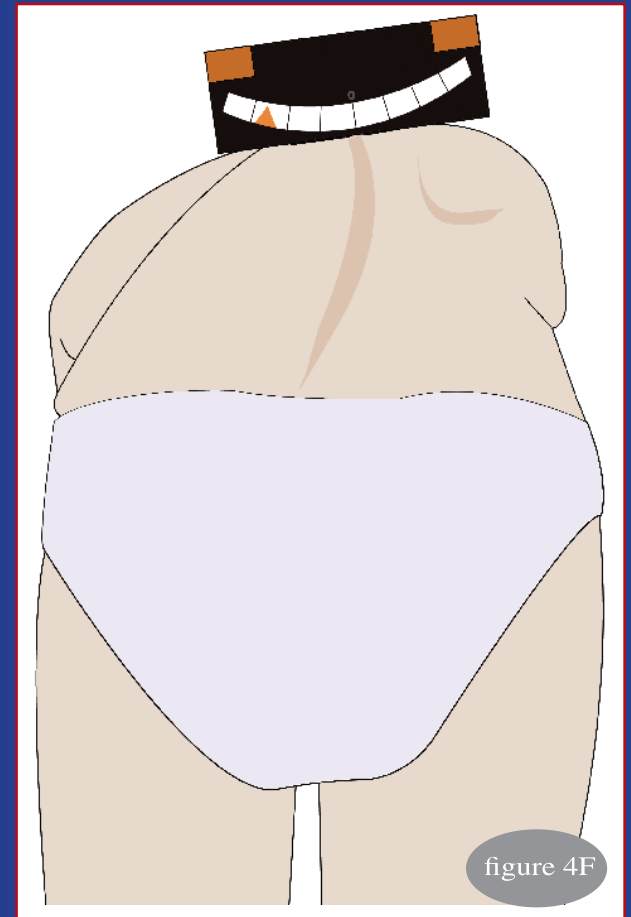


figure 4F

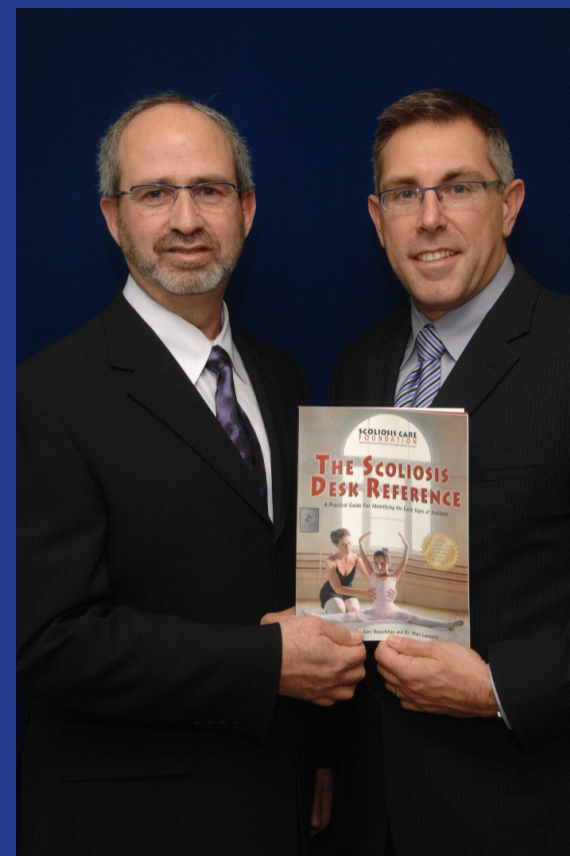
Record Keeping & The Importance Of A Second Opinion

- ♦ Always keep a record of the results of your examination.
- ♦ When a positive finding occurs:
 - Take your child to a Scoliosis Care Professional for further evaluation and a second opinion.
 - An x-ray will be recommended to confirm the presence of Scoliosis.
 - Do not attempt to make a definitive diagnosis yourself.
 - Please remember, you are not a medical professional!

SCOLIOSIS CARE FOUNDATION

Scoliosis Care Foundation
1085 Park Ave. - Suite 1E
New York, NY 10128

1-800-391-8837
info@scoliosiscare.org



Gary Deutchman, DC Founder (left)
Marc Lamantia, DC, DACNB