

It is rarely recognized by the patient or his, or her, friends as a spinal deformity, but the patient is usually brought for advice because of an accompanying deformity, such as high shoulder or prominent hip.

Pain is rare in patients presenting deformity of moderate degree, although in severe cases it may be present, and in these shortness of breath is common. This shortness of breath is often due to pressure on vital organs through deformity of the thoracic cavity.

The spinal curve may be simple, or, more frequently, compound, *i.e.*, when there is a second or compensatory curve in a different direction. The curve may be designated as functional when transitory, or structural if fixed. The position of the vertebrae of the patient when suspended, will demonstrate the character of the curve. Structural curves are always accompanied by rotation. This is best demonstrated in extreme flexion.

The pathological changes ordinarily found in scoliosis are not the result of disease of the bone, but are modifications of form and structure due to abnormal pressure and strain resulting in accordance with Wolf's law, which is "every change in the form and function of the bones, or of their function alone, is followed by certain definite changes in their internal architecture, and equally definite secondary alterations of their external conformation in accordance with mathematical laws."

Scoliosis may be either congenital or acquired.

The acquired varieties may be divided according to Lovett into those due to—

(1) Anatomical, physiological, or other asymmetries elsewhere than in the spine.

(2) Pathological affections of the vertebrae.

(3) Pathological affections of the bones and joints of the extremities.

(4) Distorting conditions due to disease of the soft parts.

(5) Habit or occupation.

In the acquired varieties it is well to differentiate between those due to pathological affections of the vertebrae and those which are symptomatic of an extra-vertebral affection or habit or occupation.

From the standpoint of treatment, the most important form of scoliosis due to a pathological affection of the vertebrae is that due to Pott's disease. Cases of lateral curvature accompanied by pain, especially if this is aggravated by motion, should be kept under observation until Pott's disease may be surely excluded, because in these, rest, not treatment, is required.

Treatment.—The aim of treatment in both the congenital and