

constant dragging of a weight however small will overcome the strongest muscles. A surgeon, recently returned from South Africa, tells me that the regular soldiers all have a characteristic lowering of the right shoulder directly traceable to carrying a 10 pound rifle. Curvature has been traced even to the habitual posture assumed during sleep. (See note 1).

With so many active causes at work, there is little wonder that we find a great number of children suffering from physical faults which usually involve a varying amount of curvature of the spine.

As we would expect, from their less active life, it is much more common among girls than boys, the proportion being about as five to one. But in an examination of 122 high school boys, I have found it present in 32 cases, and among college students I have found 87 cases in 446 examinations of men belonging to the most athletic class. The progress of curvature to permanent bony deformity follows a definite course which may be arrested at any stage.

In nearly all cases we have round shoulders, flat chest and protruding abdomen, a figure that Roth has aptly named the "Gorilla type." As the body weight is carried, when resting, on one leg, usually the right, that hip appears more prominent and the right shoulder low. This can at first be corrected by the patient, but in time it becomes more and more difficult, until this irregularity of the shoulders may be said to be permanent. The progress of the deformity may stop here; and I have seen men of fine muscular development, distinguished as athletes, showing this condition stamped on them from their school days.

Although this may be the extent of the deformity it goes on in most cases till we find a well-marked C-shaped curve, usually with the convexity to the left. The right shoulder may appear even higher than the left in spite of this curve, owing to a general deviation of the trunk to the left.

Following this condition we find some part of this curve becoming more pronounced and localised. A compensatory curve then develops in the opposite direction from the original deviation in the lumbar region, or, if the primary curve be found in the lumbar region, the compensatory curve will then appear in the dorsal. A third curve may appear, either high up in the cervical or breaking the continuity of a C. curve. In most of these cases the right shoulder tends to slope downward and forward, so that the first symptom to attract attention may be that the clothes tend to slip down off this shoulder.

The progress of a case may be varied at any point of its course and we may have all varieties and combinations presenting themselves for examination. So clearly does this condition depend upon the tiring of