

manifesting itself in the track of distribution of the filaments pressed on, or in the whole of the cord below the point of pressure. This softening of the intervertebral substances, or bodies of the vertebræ, is always the result of an inflammatory process of a low type, and is manifested generally by a more or less well marked rise of temperature and general subacute inflammatory symptoms.

The patient before you gives us no such history. Has had no pain in intercostal spaces nor in lower limbs. The curvature, as you see, is purely lateral. When I put my hands under the axillæ and lift up with some force, the curvature almost entirely disappears. This patient gives us no history of inflammatory softening; and there being no ankylosis and no angular curvature, we may eliminate organic changes, and, therefore, disease due to the first causes. But the patient does give us a history of chronic hydrocephalus. The head is still enormously enlarged, wearing as he does a seven-and-one-eighth hat. For a time the patient was partially paralyzed, and even now has not the same use of his left hand that he has of his right.

The patient also states that at seven years of age his head was just as large as at present. On closely examining the back I find the maximum of the curve in the dorsal region, opposite the eighth dorsal vertebra, while the compensatory curve is opposite the first lumbar. I also find by examination that the muscles of the left side, attaching the arm to the spinous processes of the vertebræ, are atrophied. He also gives us a history of partial paralysis of this left side, and states that even now there is marked inability to move the limbs on that side with the same degree of celerity that he can those on the right.

Hence, from the lack of organic diseased changes in the bones of the vertebræ or intervertebral substances, with the presence of atrophied muscles on the left side, we conclude that this is a case due to paralysis of the muscles, resulting in deformity from lack of tone on the left side. Now I do not say that weakened or paralyzed muscles may not at times—may perhaps very often—be a most important factor in the production of spinal curvature, in which the bodies of the vertebræ and intervertebral substances undergo organic change. But in this case, and perhaps in a considerable proportion of the slighter varieties of this deformity, we find the muscles, the principal, if not the sole agents in producing and keeping up this deformity, and no organic change, in the way of absorption, and perhaps ankylosis, result.

A few days ago I was consulted in regard to a case where there was very decided lateral curvature, that had existed from childhood, and was evidently the result of an infantile paralysis, with which she was afflicted when quite a child. It was apparently getting worse since she had been confined to a school-room, and taxed with severe studies; hence

the consultation, Now what will you do in such cases? What are the indications? If you follow the routine practice, you will proceed to adjust the regulation Plaster-of-Paris jacket. Now why will you *not* put it on in some others? for it is, without doubt, a most excellent method of treating a certain class of these affections. If you will for a few moments look at the etiology of this case, you will have no difficulty in answering the question intelligently. This case has no diseased bone to repair, no absorbed intervertebral substance to be restored, no inflammatory process to arrest by stopping the irritating cause. In another class of cases this practice would be highly proper, but what would we get here? Only pressure on the already paralyzed or greatly weakened muscles; whereas, what they do require is rest and restoration, by friction, *massage*, and well regulated exercise. I know of no exercise so good in this deformity as that on the horizontal turning-bar. Not for too long a time at first, not to the extent of tiring—wearing out what little strength your patient has; but enough to fully empty the vessels of the blood that is sluggishly circulating in them, as well as the lymph channels. Then let them rest in the recumbent position. Shampooing the muscles with a warm dry flannel cloth will also promote the circulation, and at the same time give tone to the muscular system.

Now if we had put on a plaster-of-Paris jacket, what would we have done? How much good would we have accomplished? We would have straightened the spinal curvature without a doubt, and kept it straight, too, while our dressing was on. But is that all we wish to accomplish in these cases? If the human body was a piece of mechanism which could be propped up at one side or pulled over on the other as occasion required, the plaster jacket would have been just the thing. But it is something more. It is a piece of organism, intended to get along without props or stays; and if you properly follow nature's methods in dealing with this frame, you will find she will generally lead you right. Your jacket, while it held the skeleton in its proper place, would not only have done nothing towards restoring the muscular disorder, but would really have made it worse, by depriving the muscles of their exercise, and impairing their nutrition by pressure, while they were really the parts that required treatment, nourishing and resting.

Now in this case we shall order more outdoor exercise, plenty of good, rich food, and last, but not least, *rest* on a good hair mattress; with *massage* of those muscles that are paralyzed or partially so. I don't pretend to know why cod liver oil does so much good in this class of cases; but I know it does. You will frequently be told, on making such a suggestion, that it is impossible for them to take it; that it always disorders their