

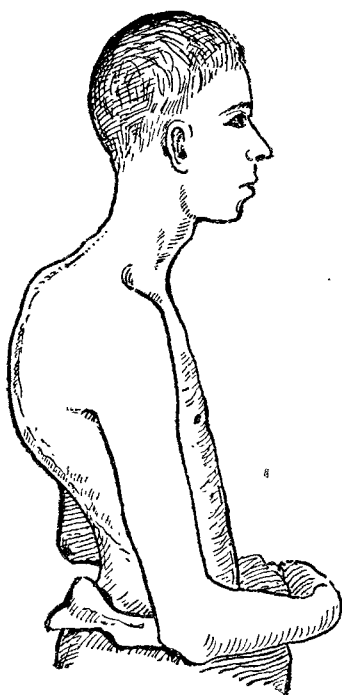
IMMEDIATE REDUCTION OF THE DEFORMITY IN CARIES OF THE SPINE.

By NOBLE SMITH, F.R.C.S. EDIN.,

SURGEON TO THE CITY ORTHOPÆDIC HOSPITAL AND ALL SAINTS' CHILDREN'S HOSPITAL.

THE reports published of my observations made at a recent meeting of the Clinical Society upon this subject were too short to indicate clearly the arguments I wished to bring forward. It was my endeavour to show:—1. That in caries of the spine forcible and violent reduction under an anæsthetic is a risky, if not dangerous, procedure. 2. That it is desirable, however, to straighten out the vertebral column to a certain extent by gentle means. 3. That gradual extension by means of an efficient splint, such as the modification which I have devised of that invented by Mr. E. J. Chance,¹ invariably gives satisfactory results. 4. That the indication as to the extent to which the spine may be straightened with safety is the sensation of comfort felt by the patient and the relief of the general symptoms. In order to prove the

FIG. 1.



Case of caries involving many or all the dorsal vertebræ in which acute tuberculosis followed forced extension.

first of my contentions I recorded two cases in which violent reduction had occurred accidentally. One was a case in which partial repair had already taken place when the spine was accidentally straightened out by exercising the patient upon a horizontal bar. The new growth of bone was broken down and the particles of bone acted like foreign bodies, causing considerable local irritation. Abscesses formed and in spite of assiduous treatment the patient died. The second was a case of acute caries in which a large number, probably nearly all, of the dorsal vertebræ were affected. This patient (Fig. 1) was brought up into nearly a straight position in a few days, general tuberculosis supervened and death occurred within a short period.

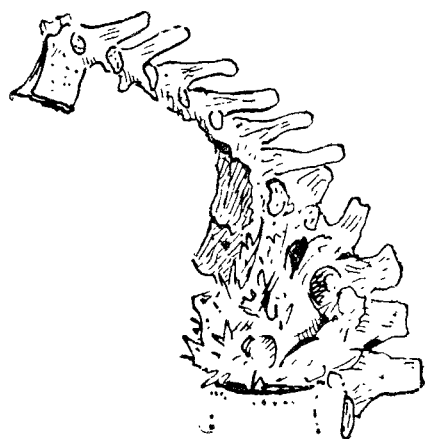
That it is desirable to straighten the spine as much as possible compatible with safety is obvious, provided we can obtain repair of the parts by substantial bone. As an example of the possibility of a large gap being filled up by bone a case was recorded by me of a boy, aged eight years, in whom the straightening took place from his lying in the prone position. Here the procedure of straightening was without violence and the result may be considered good. The patient was in an almost hopeless condition at first, all the dorsal and lumbar vertebræ being involved in the

disease. He gradually recovered and was able two years later to walk about. It is probable that during his condition of extreme emaciation, which had existed for some time when I first saw him, tuberculous deposit took place in other parts of the body, for after he had been getting about for some months (two and a half years from the commencement of treatment) he died from tuberculous meningitis. At a post-mortem examination it was found that a large gap had been formed by the total destruction of the bodies of the seventh, eighth, and ninth dorsal and the partial destruction of other vertebræ above and below, and this gap had been filled up by new bony growth (Fig. 2). Had he lived it seems probable that this growth would in time have become

FIG. 2.



FIG. 3.



firm. It was, however, in an imperfect condition and broke down upon maceration of the specimen, leaving the bones as shown in Fig. 3.

As a proof of the possibility of straightening a carious spine by means of the splint referred to I described the case of a boy, aged nine years, whose appearance before and after the application of the apparatus is shown in Figs. 4 and 5. I also exhibited photographs of a case of caries occurring late in life, showing how straight a spine might be made by gentle means (the patient was shown at the meeting). (Figs. 6 and 7.) Some of these cases I have described in my book "Spinal Caries."² Figs. 8 and 9

FIG. 4.

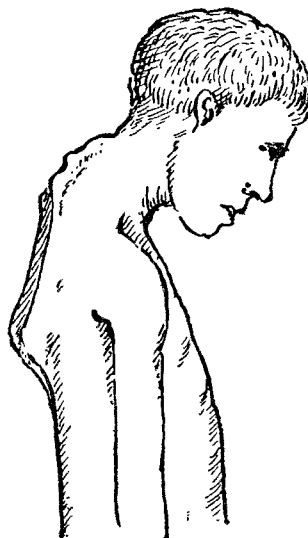
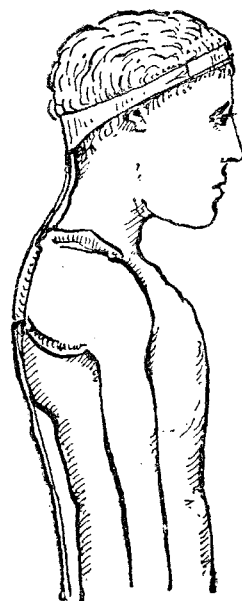


FIG. 5.



show the straightening process effected by the gradual and gentle method. I have followed this plan of treatment now for nearly twenty years and have never found it fail to benefit the patient.

Deductions.—That the greater the gap the longer the period required for perfect consolidation of the affected part of the spine. That in such a case as that to which Figs. 2 and 3 belong at least three or four years would appear to be necessary for cure as against about one and a half years in cases treated by fixation before much deformity has

¹ One of the chief of the modifications I have introduced is the method by which any one part of the apparatus can be renewed or changed without taking the support from the patient.

² "Spinal Caries," second edition, published by Smith, Elder, and Co., London, 1897.

FIG. 6.



FIG. 7.



FIG. 8.

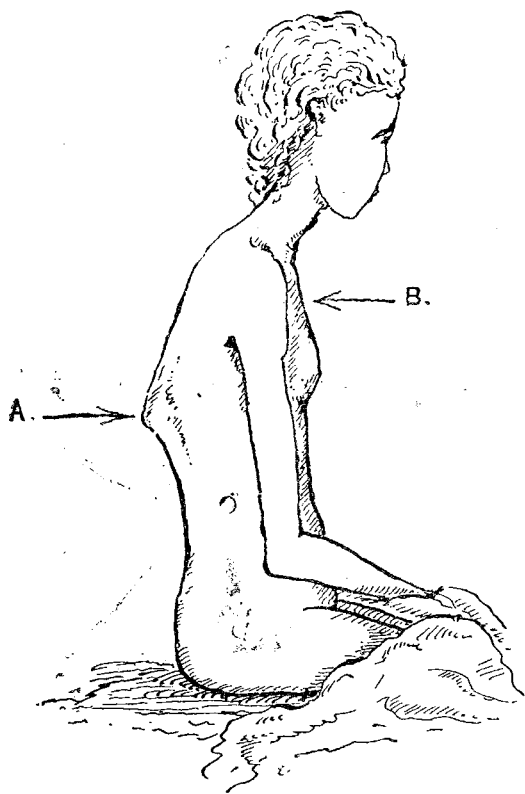
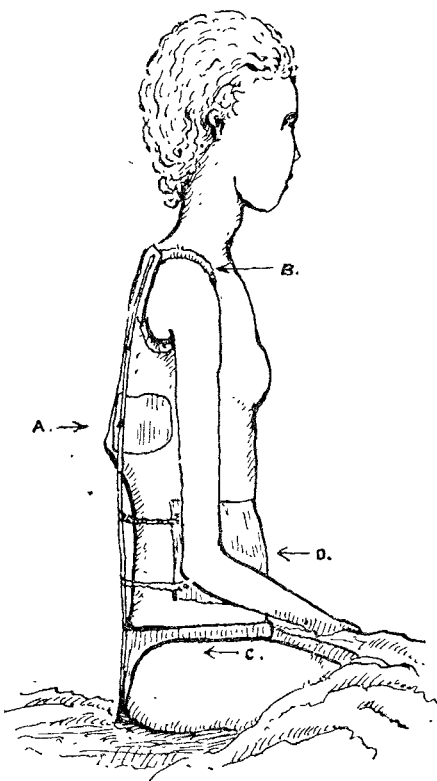


FIG. 9.



occurred. That forced reduction by the violent methods recently advocated is likely to so disturb the inflamed tissues as to aggravate the disease for a time and increase the difficulties of healthy resolution, whereas almost equally good results as regards improvement in position of the spine may be obtained by the gentle method I have described. That in those cases in which the spine cannot be so much extended by gentle measures as it can by violent efforts the limit of safety will be arrived at by the first plan of treatment whereas it will be exceeded by the second. That no question as regards the application of forced reduction would ever arise if caries of the spine were treated efficiently in the early stages, that is to say, not much later than the first appearance of deformity. I would also add that many a case of rapidly developing caries of the spine might be arrested before deformity occurred if children suffering from equivocal symptoms of weakness of the spine were not so commonly subjected to the now popular treatment by gymnastic exercises.

Queen Anne-street, W.

THE ST. JUST URBAN DISTRICT COUNCIL.—A meeting of this district council was held on Feb. 5th under the presidency of Major White. A letter was read from Mr. E. Millett, J.P., of Bosavern, who had been requested to provide closets for two of his cottages; this stated that the “receptacles” should be provided in due course and added “that the uselessness of providing confined places when people have the fields to retire to is plain. On visiting two closets belonging to two of my houses some time since I found one was the receptacle of all sorts of old rubbish—pots, pans, &c. The balarce of the roof was stuffed with furze for kindling. The other closet had a large stone placed against it so that it should not be used and they have the trouble to clean it. Now, what earthly use are closets to such people?”—A member moved that the Infectious Diseases Notification Act should come into operation on March 1st, but another member moved that the matter be deferred until St. Tibble’s Eve, which he said was neither before Christmas nor after, and this was finally carried by the casting vote of the chairman.