

more limited will the proportion of suppurating cases become; and it is in this direction that the greatest improvement in the treatment and results of hip disease will, in the future, be attained. My own estimate, from what I have seen in the hospitals and elsewhere, is that the formation of abscess may be averted by early treatment in at least 80 per cent. of the total number of cases.

2. In suppurating cases which recover, about 65 per cent. are good, and 35 per cent. moderate, cures. The average shortening is 1 inch; 50 per cent. are moveable and 50 fixed; 65 per cent. walk well and 35 indifferently.

3. In cases without suppuration which get well 77 per cent. are good and 23 per cent. moderate recoveries; the average shortening amounts to two thirds of an inch; 50 per cent. are freely moveable; 25 per cent. have slight movement, and 25 per cent. are fixed; 80 per cent. walk well and 20 per cent. indifferently.

4. The mortality due to the disease, as far as it can be ascertained in the cases I have reviewed, amounts to about 6 per cent., or if a wide margin be allowed for cases that may have ended fatally since they were lost sight of, although, when they were last seen, they were doing well, it may be safely said to be well under 10 per cent., while the mortality from general tubercular infection arising from the joint disease as a primary centre is well under 5 per cent.

A question that may naturally present itself is whether the figures I have quoted are representative, or whether they are exceptional, and such as would not be confirmed were a larger number of instances taken into account.

I believe, from all I know of the subject, that they may be accepted as typical; and I will add my conviction that the next group of a similar or larger number of cases that is published will show, not only as good, but still better results.

Now if we place the results of excision, so far as they have been recorded, side by side with the results of continued rest, I think there can be no doubt as to the conclusion at which we must arrive. Mr. Barker, in his lectures last year, dwelt emphatically on the necessity of reducing the mortality attending tubercular joint disease; but the figures he quotes have

reference to the mortality that follows excision. Thus, he gives Sacré's table of 144 excisions of the knee, with 25 deaths (of which 13 were due to tuberculosis); Mr. Croft's 45 excisions of the hip with 18 deaths, 6 caused by tuberculosis; and Grosch's analysis of 120 excisions of the knee, with a mortality of 36.7 per cent. more than half of which depended on tuberculosis. The mortality here is undoubtedly so high that Mr. Barker's desire to reduce it is both natural and praiseworthy. In Mr. Wright's case, again, the mortality cannot be estimated at less than 20 per cent. On the other hand, in cases of suppuration treated without operation the mortality, I am confident, is not more than half this amount—that is, not more than 10 per cent. My strong impression is that it is materially less than this.

As to the ultimate condition of the limb, our information respecting the results of excision is limited. But, if we take Mr. Wright's table, we find that in less than 20 per cent. of his cases had the wound healed, while in 37 suppurating cases, treated without operation, and taken without selection, there were only four in which sinuses were still discharging; and in 65 per cent. the patients walked well and firmly, and without material lameness, on the limb. As to shortening, the average amount in 30 of Mr. Wright's cases was $1\frac{1}{2}$ inch; and in 35 cases treated without operation the average amount was 1 inch.

I do not doubt that, as operative surgery improves, the immediate results of excision will be greatly superior to those I have referred to. This is foreshadowed by the results reported by Mr. Barker and Mr. Pollard. They will be so good indeed, especially when the operation is performed early, that unless the results to be obtained without operation are kept well in view, excision will, as I venture to think, be much too commonly performed. It must be remembered that the mere healing of a wound does not show that an operation was the best thing for the patient, or afford any proof that it ought ever to have been undertaken.

The main defect of excision will lie in the ultimate result, as regards the usefulness of the limb, when this is compared with a limb in which no operation has been performed, and in which the joint, instead of having been removed, has been restored to that