first stage is often amenable to mechanical treatment.

(2) Although in the early stage the bacilli may frequently be absent, the joint should be treated from the beginning as though they were invariably present.

(3) An important cause of the extension of the disease is the irritation due to pressure between head of femur and acetabulum.

(4) This is best prevented during the acute period by rest in bed with fixation of the body by a long splint to the sound side, and longitudinal and transverse extension by weights to the diseased joint.

(5) As soon as the early symptoms have *quite* subsided, the patient should be fitted with a long traction and fixation splint, and not allowed to rest for one moment on the diseased joint until completely cured.

(6) After indications of softening have become apparent and persistent, expectant treatment is no longer indicated.

## BIOGRAPHY.

Bradford and Lovett-Orthopedic Surgery.

Phelps-Philadelphia Medical News, Dec. 26, 1891.

Gillette—Philadelphia Medical News, July 11, 1891.

Poore—N. Y. Medical Journal, April 23, 1892. Sayre—N. Y. Medical Journal, April 30, 1892. Gibney—Boston M. & S. Journal, vol. 125,

pp. 613, et seq.
Lovett and Shaffer—N. Y. Medical Journal,
vol. 54, pp. 33, 141, 594.

Judson—Journal of American Medical Association. April 11, 1891.

Treves-Manual of Surgery.

## THE OPERATIVE TREATMENT OF HIP-JOINT DISEASE.\*

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Extreme views are at present advanced—on the one hand, by enthusiastic advocates of the expectant method of treatment, and, on the other, by surgeons who, with equal enthusiasm, advance views in favor of operation at an early stage in the disease. It is impossible to form

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a fair judgment with our limited amount of experience, and with very little of statistical value. We must remember that the operation of hipexcision is one which has of late years become greatly modified. The technique of the operation has been completely changed, and the large mortality formerly resulting from the operation has been reduced in early cases to five per cent. Wright, of Manchester, has a still better record, having operated in over one hundred cases with only three deaths.

It is held that in the vast majority of cases which are submitted to early operation the course of the disease is cut short very materially; on the other hand, under expectant treatment, our patients may be doomed to a lengthened period of illness-two or three years would not be considered unusual. If. therefore, we can submit our patients to an operative procedure which is to effect a comparatively early cure, we are perfectly justified in doing It is our duty to investigate the question, so. and if we find that we can rid the patient entirely of a disease which is likely to run a prolonged course, then we should not hesitate to give the sufferers from hip-joint trouble the great benefit which may be derived from modern methods of dealing with such cases by opera-Statistics are not as yet available to tion. prove our ground ; we cannot say absolutely in a given case that we can terminate the disease in so many weeks or months. This result is undoubtedly obtained in many cases, but not in all. Then, again, the danger of recurrence seems to exist after operative procedure as well as after apparent cure from expectant treatment. It would appear that better results as to function of the joint are obtained after treatment by rest than after opera-Concerning the results after operation, tion. the only definite statement that one can find is that of Sir William MacCormack, who states that one-half of successful cases walk without a stick; the other half require the aid of a stick in walking.

An error in judgment is often made in considering the advantages of operative procedure, by taking the results of operation at all stages of the disease and comparing them with the results of treatment by rest. Now the most ardent advocates of operative procedure