

Two cases illustrating the treatment of advanced hip-joint disease by Mr. Howse's method of preliminary amputation at the knee / by R. Lawford Knaggs ; communicated by Mr. Howse.

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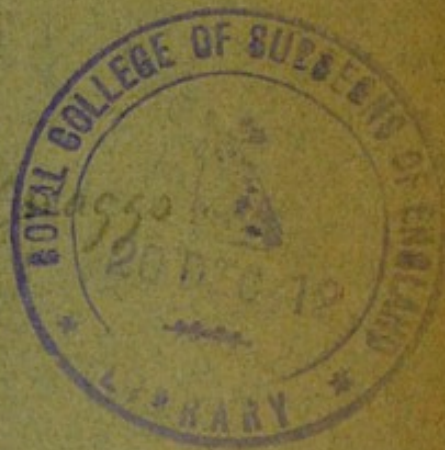
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With the writers kind regards

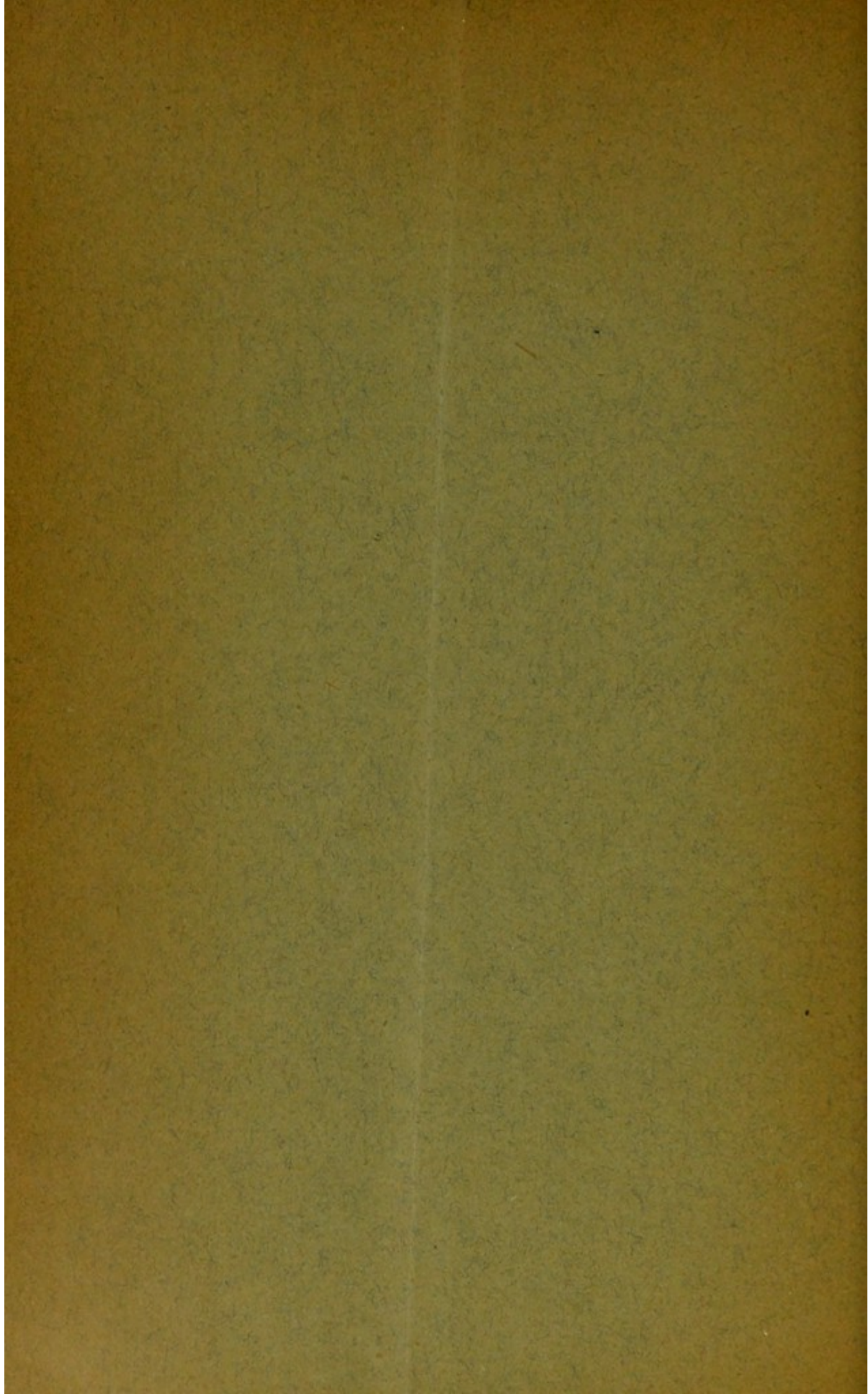
Advanced Hip Joint Disease

by

R. Sawford



1894



TWO CASES
ILLUSTRATING THE
TREATMENT OF ADVANCED HIP-JOINT
DISEASE

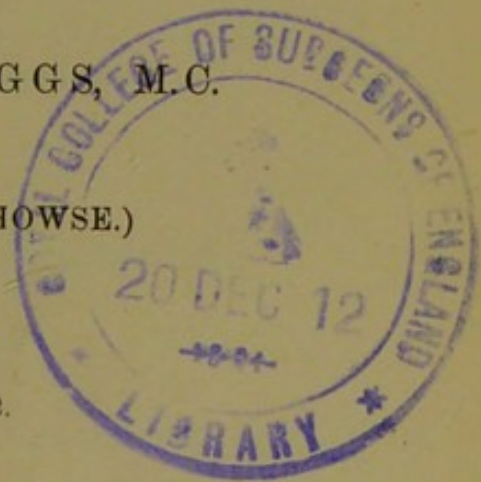
BY MR. HOWSE'S METHOD OF PRELIMINARY
AMPUTATION AT THE KNEE.

BY

R. LAWFORD KNAGGS, M.C.

(COMMUNICATED BY MR. HOWSE.)

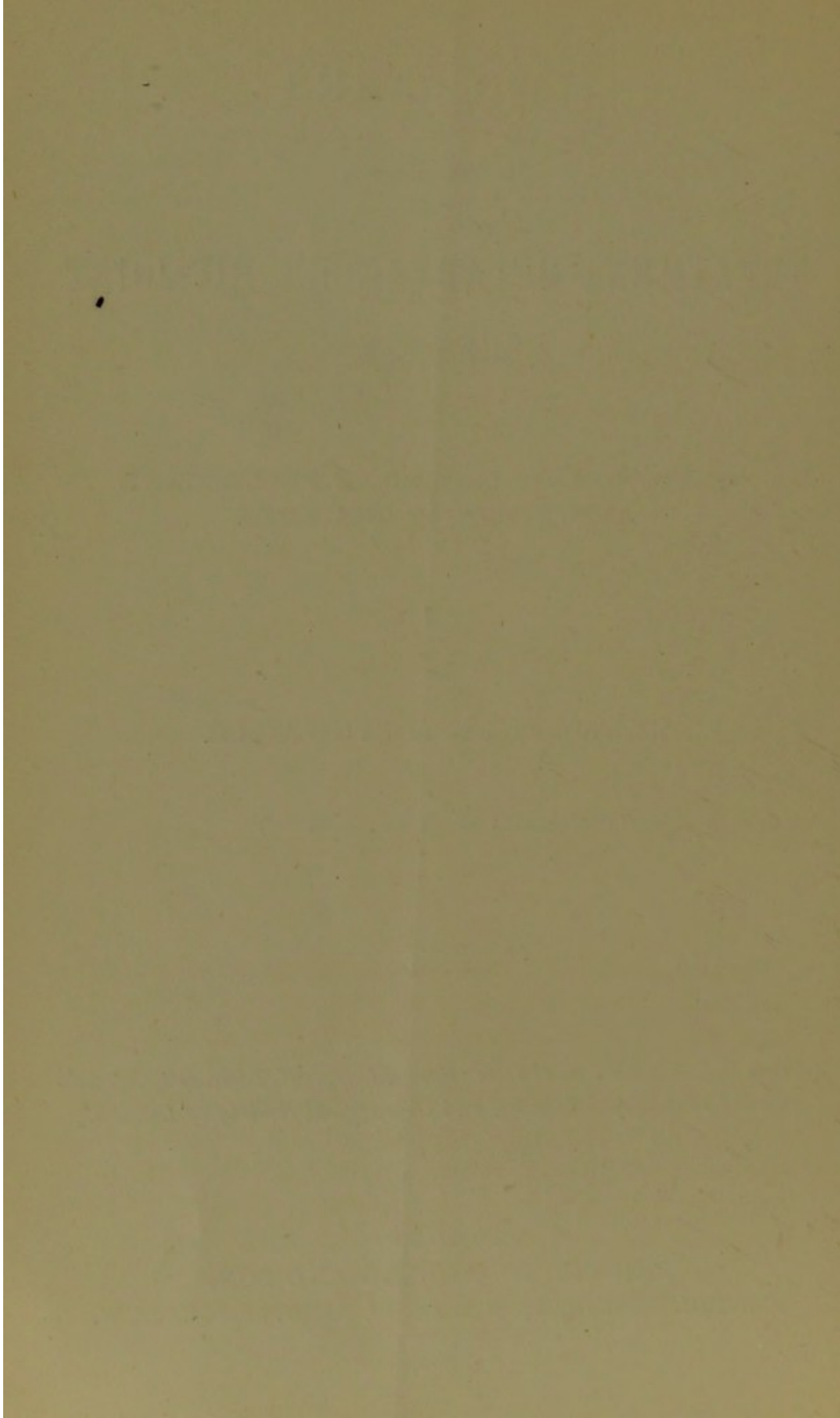
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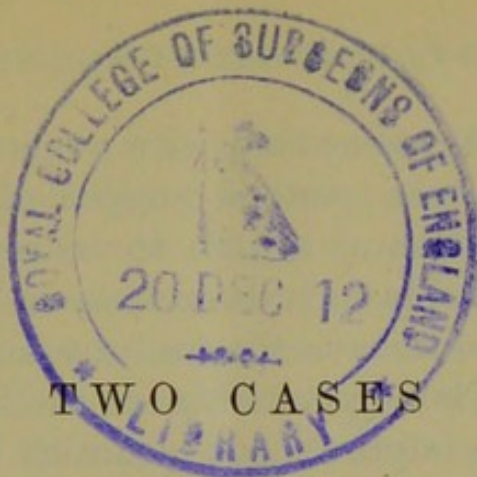


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TWO CASES

ILLUSTRATING THE

TREATMENT OF ADVANCED HIP-JOINT DISEASE

BY MR. HOWSE'S METHOD OF PRELIMINARY
AMPUTATION AT THE KNEE.

BY

R. LAWFORD KNAGGS, M.C.

(COMMUNICATED BY MR. HOWSE.)

Received April 12th—Read November 8th, 1892.

THE method of treatment in advanced hip disease by preliminary amputation near the knee, which the following cases are intended to illustrate, I first saw carried out at Guy's Hospital by Mr. Howse.

To that gentleman, I believe, is due the credit of conceiving and applying a plan which, though giving admirable results in practice, seems to be universally regarded with incredulity and amusement by those who hear of it for the first time.

Where excision has proved useless, or where amputation at the hip would be fatal in consequence of advanced

hip mischief being associated with general feebleness and visceral disease, the method suggested by Mr. Howse will enable a portion of a limb to be retained, or a life, that would inevitably have been lost, to be saved.

This plan is to remove the limb by instalments.

The first step is amputation near the knee.

After this the improvement in health is rapid and considerable. The failing powers are helped, because (1) the amount of the impoverished limb requiring nourishment is diminished; and (2) there is greater freedom from pain in consequence of the shorter leverage of the limb.

As soon as the wound is firmly healed the patients are able to get up and go out of doors on crutches, and after an interval of two or three months their general state is so much improved that removal of the shortened limb at the hip-joint involves infinitely less shock and risk than if amputation at the hip had been carried out as a primary measure.¹

CASE 1.—Eliza M—, æt. $8\frac{1}{2}$, when first seen on July 22nd, 1887, was already the subject of advanced disease in the left hip. There was two inches shortening, and dislocation on to the dorsum ilii seemed to be present. An abscess which extended under Poupart's ligament, and was limited at the brim of the pelvis by the iliac fascia, was opened in front of the great trochanter and drained. The urine contained no albumen; sp. gr. 1024.

On October 8th the discharge from the abscess was still considerable; the liver was enlarged, reaching 2 inches below the costal margin; and the urine contained one fifth of albumen and hyaline casts. Sp. gr. 1016. On October 20th there was only a trace of albumen, and on November 6th it was absent. The child had improved, and the discharge from the wound had diminished. At the end of December the liver reached as low as the

¹ These cases were under the care of my father in the Huddersfield Infirmary, and by his kind permission I am enabled to make use of them.

umbilicus, and bare bone was felt in the acetabulum. In January, 1888, the child grew worse, the discharge increased, and the albumen reappeared. On March 9th, 1888, the patient's state was so unsatisfactory that it was generally agreed that to amputate at the hip or to leave the case alone must inevitably end in death.

It was decided to adopt Mr. Howse's plan. Amputation at the knee was performed, and in spite of an attack of erysipelas, and the formation of an abscess in the front of the stump, the child had quite recovered from the operation by the middle of May. At that time the liver was smaller, the discharge less, but a trace of albumen persisted.

On July 10th she had been out of hospital three weeks with the sinus closed. The albuminuria had disappeared. On August 27th the sinus continued closed, but there was slight tenderness on pressure over the cicatrix and above Poupart's ligament. She looked fat and well but pallid, and weighed 4 st. 2 lbs.

In September she caught cold, the sinus reopened, and she began to lose flesh rapidly. The urine remained free from albumen.

On October 19th Furneaux-Jordan's amputation at the hip was performed. The head was not dislocated, but had penetrated the floor of the acetabulum; and the shaft of the femur, which was no thicker than an index finger, was broken in attempting to lever out the head. When the head had been dissected out the opening in the acetabulum led into a cavity lined by granulation tissue, in which small fragments of bone could be felt.

The opening was enlarged and the cavity scraped; still portions of bone were felt, but the patient was suffering from considerable shock, so the cavity was plugged and the operation concluded.

There had been much oozing from the small vessels, especially in the periosteum, but the femoral artery was about the size of the radial.

The future progress was slow and uneventful; portions

of bone came away from time to time, and in the middle of M^{ar}ch, 1889, she was sent to a convalescent home at Southport. She returned in May in good health but pasty-looking. There was no tenderness about the iliac or inguinal region, but there were two discharging sinuses. The liver could be felt $1\frac{1}{2}$ inches below the costal margin, and there was slight albuminuria. Her weight was 3 st. 11 lbs.

From this time she was frequently seen about with a crutch, looking well. She was examined on January 23rd, 1892. Both sinuses had been completely closed for a year, and there was no tenderness anywhere. The liver could not be felt below the costal margin. She was growing a big girl for her age, muscular and well conditioned. Weight 5 st. 5 lbs. She carried plenty of colour, and bore only a slight resemblance to the invalid of two years ago.

A very distinct trace of albumen, however, was still present in the urine.

CASE 2.—Ethel B—, *æ*t. 9, had had the left hip excised eighteen months previously for disease of a year's duration.

On March 9th, 1888, a sinus, which had never closed, was found to lead into the pelvis, and from it a good deal of pus discharged. There was no albumen in the urine and no sign of lardaceous disease.

The child's general condition was so unsatisfactory that amputation at the hip seemed to offer the only chance of recovery, and yet it seemed hardly probable that she would survive the shock of that operation.

It was determined, therefore, to adopt Mr. Howse's plan, and the left leg was amputated at the knee-joint. An excellent recovery followed, and on April 10th she was going about on crutches—the hip being kept at rest in a Thomas's splint.

The discharge from the hip diminished considerably. Before she left the hospital for the convalescent home she

was quite a different being. She had gained a great deal of flesh and colour, and spent the greater part of the day in running about the garden on her crutches, always ready to bear witness to the improvement in her health and comfort resulting from the operation.

In August, 1888, the child was readmitted not looking so well, and the discharge from the sinus was increasing.

On August 10th Furneaux-Jordan's amputation was performed. The sinus led to an opening in the acetabulum. This was enlarged and loose bone felt within the pelvis. By syringing, a piece of green, necrosed, foul bone about as big as a sixpence was got away with some decomposing blood-clot and pieces of granulation tissue. The old sinus was enlarged and scraped, and the pelvic cavity plugged through this sinus. The cavity was large enough to permit of exploration by the little finger introduced to the second joint. The shaft of the femur was about the thickness of the little finger. It was very difficult to dissect out from its firm adhesions to the acetabulum. The femoral artery was not larger than a good-sized radial artery, and there was not much bleeding. The shock was severe.

She made a satisfactory recovery, and went out with the stump quite healed on December 1st, 1888. She returned in a few weeks, a fresh abscess having opened in the groin. In March, 1889, she was sent to Southport, and on July 4th, 1889, there were two sinuses, one in the groin, and one in the track of the drainage-tube leading towards the seat of the original mischief, and discharging a good deal of matter. Weight 3 st. 8 lbs. She had lost a good deal of flesh and was looking decidedly worse, and the urine contained albumen, uric acid crystals, and hyaline casts. The liver was not enlarged. Two years later she was again seen (July, 1891). She was then looking very well. The sinuses still discharged, and the urine contained more than a trace of albumen. Her weight was 4 st. 7 lbs.

These cases may be considered to have put the merits of Mr. Howse's plan to a fair test.

Eliza M— had been the subject of lardaceous disease for some months, during which amputation at the hip had been twice rejected at full consultations of the staff as too hazardous.

For Ethel B— nothing but amputation at the hip seemed to offer a prospect of recovery, and the risk of a fatal result from shock was thought to be more than usually great. Any attempt to deal thoroughly with the acetabular mischief would have been almost sure to have turned the scale against her. The leg was removed in each case on the same day, and except for a considerable amount of shock at the subsequent Furneaux-Jordan operation in each instance, neither child gave any real cause for anxiety.

Both of them readily acknowledged their increased comfort after amputation at the knee in almost identical terms—"because it pains me less," and it is not difficult to understand the relief they must have felt at the restraint of a Bryant's double splint being replaced by a stump which they could manage for themselves when it was dressed.

When the stumps, after the preliminary amputations, were healed, both children were able to get up and go about on crutches, the hip being fixed in a Thomas's splint. They spent the greater part of the day in the open air, and were continually on the move. The effect of the fresh air and the absence of pain were very marked, and both children gained flesh rapidly. But the manner in which the hip mischief was influenced was even more remarkable.

In Ethel B— the amount of discharge diminished considerably, but in Eliza M—, the subject of lardaceous disease, the discharge gradually ceased, the albuminuria disappeared, and the sinus healed; and, except for a little tenderness on pressure for a period of three months, the last two of which were spent in most unsatisfactory

surroundings, there was nothing to show that there was any active mischief going on in the hip at all.

In the amputations at the hip the result of the previous shortening of the limb, and of disuse, was evident in the greatly diminished size of the femoral artery and in the atrophied state of the femur. In each instance this led to fracture in the manipulations to dissect out the head.

The chief trouble was hæmorrhage, not from the femoral artery which was too small to cause anxiety, but from the numerous small vessels that were cut, and from the general oozing that took place. When the femur was being removed from its enveloping muscles, and the adhesions between the neck and the acetabulum were being divided, unfortunately the bloodless method was not very useful, because the elastic bandage had to be fixed round bony portions of the pelvis, and the supply of blood through the apertures in the innominate bone could not be satisfactorily controlled without hampering the operator.

In cases where the pelvis is implicated, as in both of these, the removal of the limb by instalments offers great advantages.

The less serious character of the final amputation, and the improved condition of the patient when it is undertaken, justify the operator in more careful and thorough investigation of the pelvis, and in the adoption of more radical measures for the removal of disease than in similar cases, where amputation at the hip is performed in the orthodox way.

The shock of this operation, always great in a child much reduced by pain, prolonged suppuration and confinement in bed, would be largely increased by extending the operation sufficiently to deal thoroughly with the disease within the pelvis.

In conclusion, it may be stated that Mr. Howse's method does not aim at obtaining results superior to those

gained by primary amputation at the hip, but at reaching the same end in a very much safer way.¹

¹ This was written two or three years ago. The increased acquaintance with the merits of this method of treatment that I have gained by assisting Mr. Howse in the collection of his cases would lead me to modify this last statement. The results are in some cases decidedly superior to those obtained by amputation at the hip-joint (*vide* Mr. Howse's cases).

(For report of the discussion on this paper, see 'Proceedings of the Royal Medical and Chirurgical Society,' Third Series, vol. v, p. 15.)