Clinical and other Notes.

A CASE OF CHRONIC PARENCHYMATOUS NEPHRITIS TREATED BY DECAPSULATION OF THE KIDNEYS.

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BANDSMAN, aged 23, admitted to Queen Alexandra Military Hospital on December 30, 1922, for chronic parenchymatous nephritis. Condition on admission: Oedema of face and ankles. Heart normal. Blood urea thirty-nine milligrammes per 100 cubic centimetres. Urea concentration test 2'8 per cent. Urine albumen 2'5 per cent. No casts. Chlorides 0'53 per cent.

Patient's condition became steadily worse in spite of treatment on a salt-free Epstein's high protein diet combined with purgation and the exhibition of urea and caffeine.

By January 20, 1923, the condition was one of severe general anasarca. The urine had fallen in quantity to twenty-one ounces in twenty-four hours. During the ensuing week energetic treatment directed towards reducing the anasarca was adopted and consisted of half-ounce doses of urea daily with free purgation and hot-air baths combined with pilocarpine injections. Under this treatment the quantity of urine rose to thirty-one ounces per twenty-four hours, but soon fell again to twenty to twenty-five ounces.

Dr. Herbert French saw the case on January 22, 1923, and advised decapsulation of the kidneys. The cardiac condition was throughout satisfactory.


The right kidney was exposed through the usual lumbar incision. The tissues were very oedematous and also the perinephric capsule, which was distended and looked like the ascending colon. Considerable difficulty was experienced in delivering the kidney which was enlarged. A cyst about two inches by two inches was present at the lower pole of the kidney; this was punctured and clear fluid escaped. The capsule which was thin and transparent was incised longitudinally along the convex border of the kidney and easily stripped down to the region of the hilum. The capsule was not cut away. The kidney was replaced in the loin and a drainage tube inserted to the lower angle of the wound. The wound was closed in layers. Haemorrhage was very slight.

A similar procedure was adopted on the left side, the left kidney delivered
and the capsule incised and stripped as before. A drainage tube was inserted and the wound closed in layers.

The condition of the patient at completion of the operation was very satisfactory.

February 3. Had a good night and passed thirty-one ounces of urine, during the twenty-four hours after operation. Face slightly less oedematous.

February 7. Irregular temperature since operation. Feels comfortable. Passing about thirty ounces of urine daily. Put on infusion of digitalis two drams three times a day.

February 9. Quantity of urine increasing up to sixty ounces in the twenty-four hours.

February 15. Urea, two drams, and caffeine cit., five grains, daily. Digitalis omitted.

February 24. Quantity of urine very much increased, from 132 to 202 ounces in the twenty-four hours. Anasarca very much less.

February 27. Urea reduced to one dram daily.

Patient made gradual improvement, and on March 1, 1923, the urea was reduced to thirty grains daily. On March 10 the urea was discontinued.

Patient allowed up; there is no oedema of ankles.

March 15. Patient is now up half a day and there is no anasarca present. Meat has been added to the diet. Urine contains albumen varying from 0.5 to 0.1 per cent. He is taking a mixture of tr. digitalis five minims and tr. ferri perchlor. ten minims, three times a day.

The immediate result of the operation was that a large amount of oedematous fluid was poured out from both drainage tubes, apparently gravity drainage from the most dependent portions of the body. The next oedema to disappear was from the face, and the last to clear up was from the ankles and legs. There was no special difficulty in the operation itself, the most difficult part was in delivering the kidneys out of the wound. The tissues were full of fluid and were difficult to recognize. The stripping of the kidney capsules was easily carried out. No part of the capsule was actually cut away.

The rationale of this operation appears to be that fresh vascular anastomoses are formed between the raw surfaces of the kidneys and the perinephric capsule, and the operation is usually recommended for cases of chronic nephritis. For this case a great part of the relief would appear to be due to the mechanical drainage of the tissues, which allowed the kidneys to recover. A very marked increase in the amount of urine was seen on the exhibition of urea after the operation, although it had been administered in large doses before operation with very little benefit.