

if this happy result is not attained, and the stone still remains impacted high up in the ureter, a manœuvre which is often attended by good results is to raise the lower edge of the bed several feet from the ground by means of books so that the patient is lying on an inclined plane, with his head much lower than his feet. Sometimes this change of position is followed, in a short time, by the slipping back of the stone into the pelvis of the kidney, and the patient once more becomes freed from pain. The same result was formerly, sometimes, attempted to be secured by lifting the patient up by the legs and violently shaking the body.

When the attack of colic has passed off, the bladder will be, of course, carefully sounded for Stone, and, if it be therein discovered, measures will be taken for its speedy removal. As a general rule, it is important to remember that an attack of renal colic is accompanied, or followed, by the presence of blood in the urine, so that this should always be carefully watched for, and if found, should be immediately reported—the amount of blood representing roughly the amount of injury caused to the kidney and the ureter by the pressure of the stone.

When there is much blood, and especially if this be dark and clotted, the doctor may order hypodermic injections of Ergotin, or of some other powerful astringent. As a general rule, in these cases, allowing the patient to drink large quantities of barley water so as, so to speak, to flush the kidneys, is a very valuable measure, because by this means the *débris* which may exist in the pelvis of the kidney is washed away, and thus the formation of a new stone may be prevented. In former days, it was by no means uncommon to give considerable doses of turpentine in cases of hæmorrhage, and then a result sometimes followed which may happen whenever turpentine is given internally—extreme pain, and straining with micturition, while the urine is passed in small quantities but very frequently. This is known as *strangury*, and whenever it occurs it should be immediately reported to the surgeon, as means should at once be taken to afford relief.

When the attack of renal colic has passed off, it becomes of much importance to carefully watch for—and to report—symptoms which will show whether the stone remains fixed in the kidney or has passed down into the bladder. The Nursing in either case will be carried out

on general principles, especially as to keeping the patient quiet in bed, and preventing any over-exertion of mind or body, in carrying out the dietetic instructions of the doctor most scrupulously, and in relieving pain by fomentations, or checking hæmorrhage, according to the instructions given in each case. If the stone remains impacted in the kidney, and then sets up serious symptoms, an operation for its removal may be determined upon. This consists in making an incision through the skin and deeper parts down to the kidney, and thus obtaining sufficient room for the surgeon's finger to explore the tissues of the kidney and surrounding structures. When he has discovered the precise position of the stone, a small opening is made, through which the calculus is extracted, and any smaller grit which may be found is also washed away. The wound is allowed gradually to close; probably being drained for the first few days by means of an india-rubber or glass tube.

If the stone has passed into the bladder the choice of operation is somewhat greater. It may be either removed by the cutting operation, or broken up into minute fragments in the bladder itself, by means of a crushing machine known as the *Lithotrite*, and then the resulting grit is washed or sucked out by means of a suction apparatus, through a large catheter. Whenever a cutting operation has been performed, whether on the kidney or the bladder, the Nursing is practically the same. The wound has to be kept absolutely clean and free from any possibility of germ infection, and for this purpose everything must be kept absolutely aseptic. As the wound closes up, the discharge of pus may be considerable, and this involves, as has been previously pointed out in these Lectures, a considerable drain upon the strength of the patient, and therefore the question of sufficient nourishment is one of the greatest importance. In these cases, milk and fatty foods are invaluable, and it is worth while remembering that many patients who complain that they are unable to take fat in any ordinary form may be able to take it in the form of Devonshire cream.

In all cases of kidney disease, the same rule holds good, and a milk diet is of the greatest value, but in order to give the best result the milk should be rich in cream, or should have a considerable quantity of cream added to it.

(To be continued.)

[previous page](#)

[next page](#)