

calculus. The ordinary (as for lateral lithotomy) incision was now made, and bled profusely from the whole surface. The transverse perineal artery was so active as to be formidable, and Pean's forceps were fixed on each end of the divided vessel. When the urethra had been excised a small, flat stone escaped into the wound, and was extracted by the finger, which was then passed into the bladder on the stone there, and the staff was removed. The stone was of such large size that I enlarged the wound in the bladder with a probe-pointed bistoury before introducing the largest size of lithotomy forceps. Expanding the forceps widely I grasped the stone, which was so large and of such a shape that they slipped off. After repeating the process in a variety of directions, it was plain that the stone could not be removed through this incision, and that if the stone was to be had it must be by the supra-pubic operation. The wound had all along bled profusely from its whole surface, and by this time the patient had lost at least a pint of blood. A sponge was packed into the perineal wound, the supra-pubic incision made, and the bladder opened above the pubis on the stone, a matter of little difficulty, as the stone was pushing forwards the anterior bladder wall. The incision in the skin extended upwards for about four inches from the pubic bone, the bladder wall being opened for about 2 inches up to the reflection of the peritoneum. The lithotomy forceps were again introduced, but had no power and slipped. There was the same difficulty as before. The midwifery forceps of a neighboring practitioner were now sent for and on their arrival one blade was introduced at a time, as in an ordinary instrumental delivery. The entrance of the first blade was followed by a gush of putrid urine which escaped over the abdominal wound, and must inevitably have run into the peritoneal cavity if it had been opened. This urine—about 2 oz.—was lying in the base of the bladder, under the stone, and at a lower level than the urethral opening. The forceps being locked, the stone was easily removed by slow and gentle traction, the wound in the bladder expanding without laceration, and no further obstruction being encountered because of the long incision through the superficial soft parts.

The bladder wall was very much thickened, and the lining membrane so vascular that it bled free-

ly. Lying at the lowest part of the bladder was another small flat stone which was now removed. The operation was completed by the introduction of two deep and three superficial sutures of catgut into the abdominal wound, leaving only the lower half open; by stitching a full-sized drainage tube, reaching the bladder, into the perineal wound; by flushing out the bladder and wounds with boracic lotion, and finally by the introduction of a large sponge with Pean's forceps attached, into the bladder to stop the oozing from its interior still going on. The operation occupied three-fourths of an hour, including the delay occasioned by having to send for forceps. An hour afterwards the bladder sponge was removed, and all bleeding had ceased. The patient had a fair pulse, but had not yet rallied from the cold, chloroform and shock.

#### AFTER PROGRESS.

August 16th, evening. Fair pulse 110; temp. 97° F. Has not yet recovered from shock, and is inclined to be cold. Hypodermic injection of  $\frac{1}{4}$ th gr. morphia, and some hot milk and water.

August 17th. Morning, temp. 97°; hands still cool but body warm and perspiring. Has had a good night; slept 3 or 4 hours, and taken freely of milk without sickness. 1 p.m.—Temp. 97.6°; pulse 112. 3.40 p.m.—T. 99°; p. 120. 10 p.m.—T. 102.6°; p. 160; ordered 10 grs. quinine, 10 grs. pulv. ipecac co.

August 18th. 1 a.m.—T. 100.2°; p. 140. 8.20 a.m.—T. 97.4°; 3.20 p.m.—T. 98.8°; 8 p.m.—T. 99°; p. 117. After this the temperature only once reached 100°. For several nights he required morphia to make him sleep, not because of pain, but restlessness.

August 19th. Most of the urine escapes by the abdominal incision in spite of the fact that perineal tube is large and patent. The tube removed in consequence. Secretion of urine very free, and has been ever since operation. To-day he took a quantity of egg-flip, looks much better, but his tongue is dry and he is disposed to hiccough. Ordered calomel gr. j. every four hours.

August 21st. His pulse occasionally intermits and has kept up to about 120 since operation. Ordered tr. digitalis M. 10 every 4 hours. Tongue much cleaner. Asked for and relished some tea and toast.

August 22nd. Most of the urine escaped through the abdominal wound, and a tendency,