A case of vaginal lithotomy : with remarks on stone in the female as it occurs at the Norfolk and Norwich Hospital ... [and 3 other papers] / by Charles Williams.

Contributors

Williams, Charles, 1827-1907. Royal College of Surgeons of England

Publication/Creation

London : John Bale & Sons, 1886.

Persistent URL

https://wellcomecollection.org/works/dwmavy74

Provider

Royal College of Surgeons

License and attribution

This material has been provided by This material has been provided by The Royal College of Surgeons of England. The original may be consulted at The Royal College of Surgeons of England. where the originals may be consulted. This work has been identified as being free of known restrictions under copyright law, including all related and neighbouring rights and is being made available under the Creative Commons, Public Domain Mark.

You can copy, modify, distribute and perform the work, even for commercial purposes, without asking permission.



Wellcome Collection 183 Euston Road London NW1 2BE UK T +44 (0)20 7611 8722 E library@wellcomecollection.org https://wellcomecollection.org

A CASE OF VAGINAL LITHOTOMY;

WITH REMARKS ON STONE IN THE FEMALE AS IT OCCURS AT THE NORFOLK AND NORWICH HOSPITAL.

(Reprinted from "The Lancet," November 7, 1885.)

CASE OF LITHOTOMY IN WHICH AN EN-LARGED MIDDLE LOBE OF THE PROSTATE GLAND WAS ACCIDENT-ALLY REMOVED.

(Reprinted from the " British Medical Journal," June 15, 1878.)

A CASE OF STONE IN THE BLADDER OPERATED UPON A SECOND TIME.

(Reprinted from the "British Medical Journal," Nov. 14, 1885.)

A CASE OF STONE SACCULATED IN THE BLADDER OF A FEMALE.

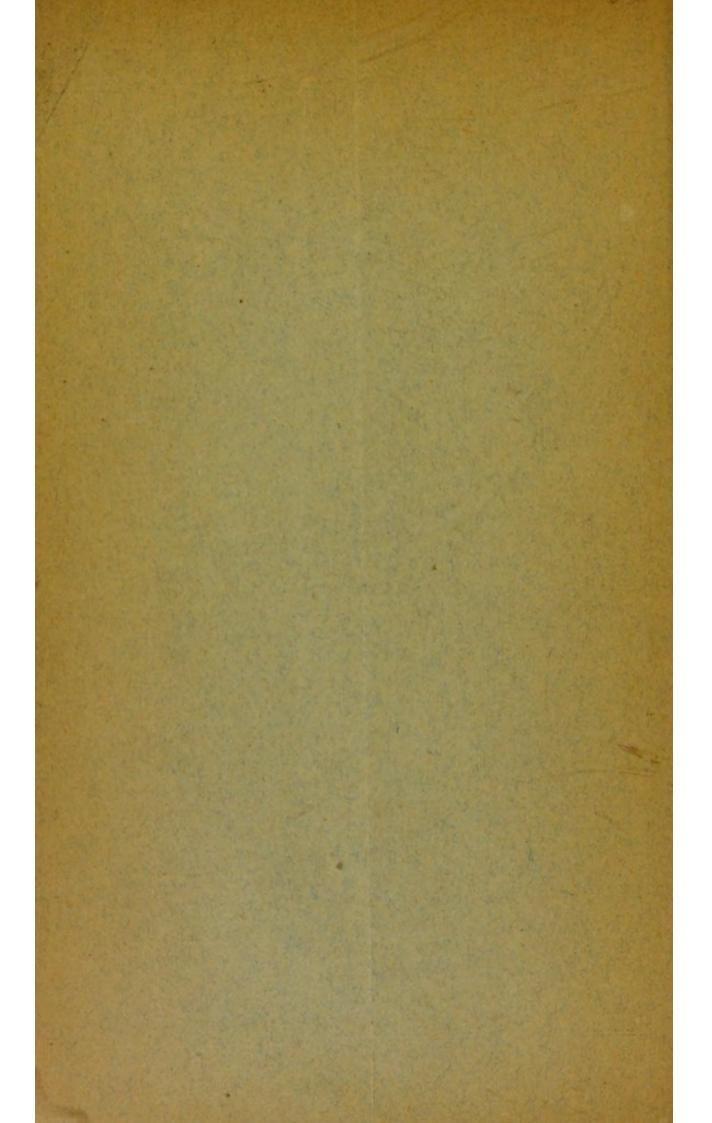
(Reprinted from " The Lancet," April 17th, 1886.)

BY CHARLES WILLIAMS, F.R.C.S.Ed.,

Surgeon to the Norfolk and Norwich Hospital.

London: JOHN BALE & SONS, 87-89, GREAT TITCHFIELD STREET, OXFORD STREET, W.

1886.



A CASE OF VAGINAL LITHOTOMY;

rtten

With Remarks on Stone in the Female as it occurs at the Norfolk and Norwich Hospital.

BY CHARLES WILLIAMS, F.R.C.S.ED.

S. C—, aged sixty-one, was admitted into the Norfolk and Norwich Hospital, under my care, in December, 1882, suffering from stone in the bladder. She was tall and much emaciated, and her general health greatly impaired by the severe sufferings she had experienced during the previous twelve months. She appeared to be almost worn out by pain and want of sleep. She could not assume the erect posture, her pain being much aggravated thereby; and she had also complete incontinence of urine. Prior to a year ago the symptoms were not very marked. During the past few months, however, she had voided thirteen small grey calculi. The urine was faintly acid, sp. gr. 1015, and contained mucus and pus in large quantity. Her maternal grandfather suffered from stone in the bladder.

The passage of a sound readily detected the presence of a large calculus, on which the bladder had firmly contracted; it formed a smooth tumour projecting into the vagina, and completely occluded this passage. She was very anxious to be relieved of her trouble, and about two weeks after admission she was placed on the operation table, a straight staff was passed into the bladder under the stone, a long incision made in the vesico-vaginal septum

from its posterior part forwards to within a short distance of the urethra, and with some amount of difficulty the calculus was dislodged and extracted through the opening. The amount of hæmorrhage was very trifling. The wound was sewn up with a continuous suture of green gut, a catheter placed in the bladder, a suppository containing half a grain of morphia inserted into the rectum, and one grain of extract of opium given by the mouth. The calculus was of a flattened oval form, and consisted of uric acid and urates coated with a thick, dense layer of phosphates; it weighed 7 oz., and measured 81-in. in its longest circumference, 612-in. in its shortest, 233-in. in its largest diameter, and 21-in. in its shortest. In the evening a fair amount of very bloody urine had passed. She was in no pain. The skin was warm and perspiring. The next day there was an abundance of urine. On the fourth day she was very comfortable; on the eighth day a good deal of urine had escaped into the bed; on the ninth day all the urine ran into the bed, and none came through the catheter, which was removed, as it was evident enough that the wound had opened. She went on very well until the sixteenth day, when the report states: "She takes food well. There is slight diarrhœa, and plenty of urine, which is not offensive. She had a rigor this evening." From this time she gradually sank, and died on the eighteenth day.

Examination of the body after death showed that the right kidney was enlarged to three times its natural size; the pelvis was converted into a large abscess sac, and contained thick pus; the ureter from this kidney, at about two inches from its origin, was firmly blocked by a calculus. The left kidney was considerably hypertrophied; its structure was tolerably healthy; there was scarcely any dilatation of its pelvis. The other organs were not examined.

Remarks.—Stone in the bladder of the female is by no means a common disorder. The records of the Norfolk and Norwich Hospital from 1771 to 1884, a period of 113 years, show that of 1,234 cases of stone admitted into that institution and operated upon, only 52 of this number oc-

curred in females; this gives a proportion of I female to 24 males. On an average I female is admitted about every two years; whereas in the same space of time 21 males are, on an average, admitted with that complaint. Of the 52 cases, 3 were caused by the introduction of foreign bodies into the bladder by the females themselves, the hair-pin being the favourite instrument used. The character of the stones in all these cases was phosphatic. Among the 52 cases no stone was removed comparable to the size of the one I took from this woman. The next in size weighs $5\frac{1}{2}$ oz., and was removed in 1773 from a female aged twenty-nine, who recovered. This was the first female operated on at the hospital. Cure was effected in 48 of the cases; 4 died; the rate of mortality being nearly I in II. The ages of those who died were as follows: One of twelve years, whose calculus weighed 2 drs., and consisted of uric acid and urates. The next was fifty-three years of age; the stone weighed $3\frac{1}{4}$ oz., and consisted of mixed phosphates. The third was sixty-one years of age; she had two stones in her bladder, one of which was free, the other sacculated : both weighed 4 drs. The fourth case, aged sixty-one, is the subject of this paper. Of the 52, there occurred-

Under	10 years of	age	 	14 C	ases.
33	10 to 20	23	 	10	,,
"	20 to 30	33	 	IO	,,
,,	30 to 40	,,	 	5	33
33	40 to 50	"	 	4	"
,,	50 to 60	,,	 	4	,,,
"	60 to 70	"	 	5	33
				-	
				52	

There were 34 under thirty years of age, and 18 from thirty to seventy. The ages of the hair-pin cases were seventeen, twenty-one, and twenty-two. In 15 cases the calculi weighed I oz. and over, 8 consisting of phosphates and 7 of urates; the rest were under that weight. In one woman, whose age was fifty, the stone weighed only 4 grs. In no case did a relapse of stone take place. In 50 females, only one stone was found in every bladder, in 2 females, two stones were found in each bladder. In 21 cases the calculi consisted of uric acid and urates; in 21, of mixed phosphates; in 7, phosphates and urates; the rest, mixed.

So far as I can ascertain, this is the first time that a case of stone in the female bladder has been operated on by vaginal lithotomy at the Norwich Hospital. The specimens of calculi removed from the fifty-two females are preserved in the museum attached to the institution, and to the greater number is appended the word "extracted." I presume that this word signifies removed by means of dilatation, with probably division of the urethra, or else division of the urethra without dilatation. Unfortunately there are no records at the hospital to indicate what has been the precise nature of the operation performed on females. The only allusion to the subject in Mr. J. G. Crosse's work on Calculus is contained in the following passage: "Female patients were at an early date operated on by cystotomy, but of late years all calculi from the bladders of females have been removed by dilatation." What the operation "cystotomy" was there is no evidence to show. Mr. Crosse does not describe what he means by that term-a term which simply signifies the operation of opening the bladder, be it male or female, for the extraction of the stone. The word itself does not indicate any exact kind of operation, so we are left in the dark as to what was done by our forefathers at this hospital.

It is supposed that vaginal lithotomy is an operation of modern date; it certainly is one rarely performed, inasmuch as Dr. Aveling, in an excellent paper on the subject, printed in the *Obstetrical Transactions* for 1863, could not find more than thirteen cases published in British surgery, and twenty-two in foreign. Curiously enough three of the thirteen cases are recorded by a Norfolk surgeon, Benjamin Gooch, with whom the operation seems to have originated. In his work on Surgery, dated 1767, he states as follows:—

"Mrs. T----, aged between forty and fifty, after having

been severely afflicted with the stone for about ten years, resolved to submit to the operation, should it be thought advisable, her constitution being much impaired, and having a constant discharge of purulent matter from her bladder. On August 17th, 1740, she asked my advice, and, after well considering all her complaints, I was of opinion that it was right to extract the stone, though the event of the operation could not but be looked upon as very precarious, for by passing my finger up the vagina uteri I could plainly discover it was of a large size, the friction of which had caused inflammation and ulceration of the bladder. After putting her in the usual posture for the operation, I intended to have proceeded in the common manner, by dilating the urethra, and making an incision as should be found necessary to facilitate the extraction of the stone; but finding with my finger that it lay very favourably to be cut upon through the vagina uteri, now considerably dilated, I altered my original design, and with the approbation of two experienced practitioners, cut directly upon it and extracted it, with very little pain to the patient or trouble to myself, compared with what a stone of between three and four ounces' weight must unavoidably have occasioned by performing the operation in the common method. The symptoms after the operation were the most gentle; the ulceration of the bladder soon healed by soft balsamic injections, and she was perfectly cured in three weeks, without any defect remaining in the retentive faculty. I have since been concerned with other surgeons in two cases similar to this who were induced to practise the same method, and which succeeded as happily."

Benjamin Gooch was appointed the first consulting surgeon to the Norfolk and Norwich Hospital when it was established in 1771. Whether the early hospital surgeons practised the operation as devised by him there is no evidence to inform us.

CASE OF LITHOTOMY,

In which an Enlarged Middle Lobe of the Prostate Gland was accidentally Removed.

THE specimen which I have the pleasure to exhibit to you^{*} represents an enlarged middle lobe of the prostate gland, accidentally removed from a gentlemen on whom I performed the operation of lithotomy.

The patient was a tall thin man, aged 72, living about ten miles from Norwich. He had had symptoms of stone in the bladder for upwards of twelve months. A few months before I visited him, he had passed, on one or two occasions, a large quantity of blood in his urine. Of late, he had suffered much from the presence of the stone. He had been greatly disturbed during the night, and had become low-spirited. His urine was found to be quite healthy and free from albumen. His feet were in nowise œdematous; and he could eat freely. There was a loud systolic *bruit* heard over an extended area of the chest, giving rise to no inconvenience. Five years previously, he fractured the neck of his right thigh-bone; ankylosis of the hip-joint resulted from the injury, and he now walks with a perfectly straight and stiff, but shortened, limb.

On July 6th, 1876, with the assistance of Messrs. Morton, surgeons, of Aylsham (under whose care this patient had been), I performed the usual lateral operation, and removed

* Norwich Medico-Chirurgical Society.

a single stone, of an oval flattened shape, weighing five drachms, of uric acid formation. An enlarged middle lobe of the prostate became engaged between the blades of the lithotomy-forceps, anterior to the hinge, and was unconsciously torn off and came away with the stone. There was free arterial hæmorrhage from a deeply seated vessel, which was without much difficulty seen and secured by ligature. A tube was placed in the wound.

On visiting the patient next day, I found him easy and comfortable. There had been no sickness; he had slept fairly well; pulse 54. The wound looked well; the urine was clear, and dropping freely from the tube and abundant in quantity. On the ninth day, he passed the whole of his urine through the penis, and the wound was healing rapidly. Three weeks later, I found him in excellent health, and the wound perfectly healed. He seldom found it necessary to micturate more than once during the night.

REMARKS.—This case presents some points of much interest.

I. The presence of a loud systolic *bruit* is not a pleasant sign in connection with the administration of chloroform, of which my patient inhaled from four to five drachms, and from which he suffered not the slightest inconvenience, either during the operation or subsequently.

2. The fracture of the neck of the right os femoris had resulted in ankylosis of the joint. The limb was immovably fixed in the straight position ; therefore it could not be tied up in ordinary lithotomy fashion, but was held by an assistant in a straight direction over my left shoulder. This rendered the performance of the operation somewhat less casy than usual. The parts forming the perinæum were lax instead of being tense, and, in order not to wound the rectum, which was large and flaccid, I passed my left forefinger into the bowel, and retained it until the point of the . knife was lodged in the groove of the staff ; and, by directing the edge of the knife very obliquely outwards, the rectum escaped injury—an event which, in all probability, would have occurred had not these precautions been adopted. If such an accident had happened, taking into account the age of the patient, I fear the termination of the case would have been unfavourable.

3. The removal of a large portion of the middle lobe of the prostate, though quite accidental, was attended with a happy result. The man was relieved of a trouble which sooner or later, would have been a source of grievous annoyance to him.

I witnessed the same accident in a case operated on by Mr. Cadge. In the forceps, between the stone and the blades, there came away three masses, which were apparently fibrous outgrowths of the prostate, and which weighed one drachm two scruples. In two months, the wound had healed and the patient was strong and well, Mr. Cadge remarks : " It has happened to me twice before to remove small fibrous tumours of the prostate gland during the operation of lithotomy, and apparently without harm to the patient."-(Transactions of the London Pathological Society, vol. xiii., 1862). And he gives the experience of an expert modern lithotomist on this subject, who says : "It has occurred to me, eight or ten times, to bring away portions of the prostate and without noticeable injury to the patient. In more than one instance, it was the prominent third lobe which got between the handles, anterior to the hinge, and was torn off entire; and although I have never known unpleasant results to the patient, and that sometimes he has been benefited in after-life, by having got rid of an useless impediment to a natural function, I would not willingly that such an occurrence should happen, and I try to avoid it by turning the blade of the forceps to the lower angle of the wound as I leave the bladder; but when it does occur, I lay no account by it."

A Case of Stone in the Bladder operated upon a second time.*

ON February 9th, 1879, I was requested by Mr. Morton, of Aylsham, to visit with him the gentleman on whom I had performed lithotomy in July, 1876. I found him suffering from symptoms indicative of stone in the bladder. He was micturating eight or ten times during the night, and much more frequently during the day; he could not ride in a vehicle without experiencing excessive pain in the bladder; the stream of urine often stopped abruptly whilst he was passing it, and there was an aching pain in the glans penis. He had passed no blood; the urine contained small pieces of mucus, otherwise it was clear and healthy. His tongue was clean. The bowels were regular; he had a good appetite, and indeed, looked as if he were in excellent health. On sounding his bladder, a stone was readily detected. He was then in his seventy-fourth year.

On February 20th, with the help of Messrs. Morton, I performed lateral lithotomy along the line of cicatrix, which consisted of firm condensed tissue, and was hard to cut through. In dividing the prostate, about a dessertspoonful of thick offensive pus escaped through the wound ; this evidently had existed as an abscess, probably chronic, in the gland. A flattened oval calculus of uric acid, weighing three drachms, and a smaller one of oval shape, of similar material, weighing half a drachm, were removed;

* Sequel to the foregoing case.

there were no facets on either stone. I could feel no enlargement of the prostrate in the bladder. The part from which the middle lobe had been removed at the first operation was smooth and healthy, and was on a level with the floor of the bladder. The rectum was tucked up, in the form of a *cul-de-sac*, to the inside of the tuber ischii; this was probably occasioned by the contraction of parts after the first lithotomy. It created a difficulty in keeping clear of the rectum whilst making the deep incision; but, by a cautious use of the knife, the bowel escaped injury. Hæmorrhage was very free from a deep vessel, which could not be tied. A tube was placed in the wound, and pieces of lint plugged around it; this had the effect of preventing any further bleeding.

The next day the patient was easy; he had suffered no pain; the urine flowed freely through the tube, which was taken out the following morning. On the third day the pieces of lint were removed; his temperature was 101°, and pulse 72.

On the fifth day the bowels were opened for the first time; a small portion of fæces came through the wound.

On the eighth day, his temperature was 99.8°; pulse 72. The wound looked sloughy. Fæcal material occasionally passed through it; but, from this time, he steadily progressed to complete recovery, and the wound healed most perfectly.

REMARKS.—The above case presents many features of unusual character and interest; it forms a sequel to the notes of the case published in the *British Medical Journal* of June 15th, 1878. The first and most interesting point is the fact of the man's requiring lithotomy a second time. One might be tempted to think that a small calculus may have been overlooked at the first operation, not an uncommon circumstance in the hands of the best lithotomists; in this case, no stone or fragment of stone was left in the bladder. The accidental removal of the fibrous growth from the prostate in 1876 required a careful exploration of the interior of that cavity, in order that the amount of mischief which had resulted from the use of the forceps might be ascertained. My finger swept the floor of the bladder, and nothing in the form of a calculus or piece of one, was to be felt. Again, for a period of one year, he suffered no bladder-irritation of any kind. He certainly would have done so had the smallest portion of stone been left in the vesical cavity. At the end of twelve months, symptoms of stone began to show themselves, slight at first, but more severe as time went on, until in the end, they culminated in great distress, and a second operation was imperatively required.

The next point is the condition of the floor of the bladder. Two years and a half had elapsed since the part was removed, and no further growth from the prostate had taken place. The wound made by such removal had healed, and the floor of the bladder was soft, even and natural. The giving way of the rectum on the fifth day was an awkward and annoying circumstance. I am not surprised at it when I consider how near the bowel the knife must have gone, in consequence of the attachment of the rectum to the cicatrix, and how thin was the barrier between the intestine and the wound. The necessity that existed for plugging the wound with lint to arrest deep hæmorrhage, and keeping the bowels too long confined, contributed, I doubt not, to produce this result; however, the patient's excellent constitution bore him bravely through these troubles. The rectal wound closed, the external one healed, the parts around became firm and sound. He is at the present time in good health, and in his 80th year.

The systolic *bruit* was still to be heard, and the irregular, intermittent beats of his heart still existed ; nevertheless, the patient inhaled chloroform with perfect freedom, and without indication of danger.

Since the publication of this case in 1878, Mr. Reginald Harrison has recorded, in the sixty-fifth volume of the *Medico-Chirurgical Transactions*, two cases of lithotomy in which tumours of the prostate were successfully removed. In one instance the enlarged portion of the prostate seemed loose and disposed to come away; it was enucleated with the forefinger, and was about the size of a walnut, and analogous in structure to an adenoma of the breast; the patient made a good recovery. In the other case, a mass about the size of a hen's egg was shelled out, and was of similar structure to the above; this man recovered. The subject of recurrence of stone after lithotomy has been fully treated by me in Holmes' *System of Surgery*, vol. iv., second edition, 1870; and in the *Lancet*, May 18th, 1878; and will be again in a future communication.

A Case of Stone Sacculated in the Bladder of a Female.

CASES in which a vesical calculus is impacted in a cyst situated in the walls of the bladder are so extremely rare, that I consider it a duty to record this very interesting example.

A fine and healthy girl, aged three years, living in Norwich, came under the care of the late Mr. George Hutchison in the year 1873, having for several months previously suffered from very decided symptoms of stone in the bladder. It had been noticed by her mother that from the time of her birth she had experienced a difficulty, as well as occasionally severe pain in passing urine, and that sometimes she voided blood mixed with it, and was in the habit of straining so violently as to produce prolapsus of the rectum.

On sounding the bladder which was an unusually capacious one, it was with some difficulty that a calculus could be detected. At the wish of the parents Mr. Hutchison resolved to remove the stone by dilatation. Mr. W. H. Day assisted at the operation, and I was requested to administer chloroform. The urethra was freely and quickly dilated with Weiss's trivalve dilator. There was considerable trouble to fine the stone, and when found a still greater trouble to seize it with the forceps (and it was particularly noticed that, although the patient was thoroughly under the influence of the anæsthetic, the getting hold of the stone

with the forceps occasioned severe straining); the blades could not be made to grip the calculus; they continually slipped off, bringing away pieces of the stone. At last it became absolutely necessary to ascertain what occasioned the difficulty. For this purpose the urethra was still further dilated, and the neck of the bladder was also divided with a probe-pointed bistoury. The stone could now be felt with the point of the finger immovably fixed in the floor of the bladder on the patient's left. It appeared to be the size of a pigeon's egg, and was enclosed in a sac, through the neck of which a small portion protruded into the vesical cavity, and it was off this nodule that the forceps so continuously slipped. Many efforts were made to dislodge itfirst with a scoop, then with the finger, which could barely reach it, and next with the forceps ; they all proved unsuccessful. Several portions were broken off the uncovered portion, but the main piece was left in situ, as it was considered undesirable to make any further attempt to remove it, the patient having been a long time under the influence of chloroform and apparently in a very exhausted condition.

The next day the child had voided very little urine. A catheter was introduced, and a small quantity of sanguineous urine flowed out. She was very drowsy, and had been so since the operation. When roused she took milk and brandy very freely, but immediately aftewards became drowsy again; she did not appear to have recovered from the influence of the chloroform. The next day she died. No post-mortem examination was permitted.

I am induced to believe this child died of chronic chloroform-poisoning, and not from the effects of the operation, which was by no means roughly performed, and there was very little blood lost. She never thoroughly revived, but became comatose, and died in that condition. It is difficult to imagine what could have given rise to the formation of the sac; there never was an obstruction to the escape of the urine, such as stricture or prostatic enlargement might engender for neither existed. We are taught that a cyst is usually formed by the straining necessary to expel the urine; the mucous membrane is forced between the bands of muscular fibres, hypertrophied in consequence of the strain to which they are subjected. Nothing of the sort can apply in this case, and it is not easy to believe that the stone was the cause of the cyst, which it might have been had it been situated close to the neck of the bladder. When impacted in this situation, the very pressure to which a stone is subjected by the constant and long-continued action of the bladder to expel it causes the mucous membrane to ulcerate through, and the stone is in due time forced into a cavity, which enlarges as the stone grows, and in this way it may form a tumour in the vagina, as was the case reported by me in the Lancet, of November 7th, 1885. An effort is then made by nature to contract the opening, which in this child was nearly accomplished; but the calculus was far from the neck of the bladder, and could barely be touched with the point of the finger, so that a different explanation of the formation of the cyst is required; and as no examination was allowed to be made, it seems to me to be almost impossible to suggest in what way the sac was formed. Sabulous matter or a few urinary crystals may probably have been deposited originally in a mucous follicle, lacuna, or fossa, and gradually augmented in quantity, and in this way the sac enclosing the calculus may have been produced. The mother of the girl at four years of age suffered from stone, which was removed by the late Dr. Edward Lubbock; it was the size and shape of a walnut. She has suffered from incontinence since that time.

