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CARCINOMATOUS PAPILLOMA OF BLADDER. OCCLUSION OF ORIFICES OF URETERS. DEATH BY URÆMIC COMA

BY

SAMUEL B. WARD, A.B., A.M., M.D.

PROF. SURG. PATHOLOGY, ALBANY MED. COLL.; VISITING SURG. TO ALBANY HOSP'L; CONSULTING SURG. TO ST. PETER'S HOSP'L, ETC., ETC.

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By SAMUEL B. WARD, M.D.,

ALBANY, N. Y.

Col. J., American, married, 55 years of age, of healthy parentage and relations on both sides, has never had any serious illness, nor met with any injury; has always been of perfectly correct habits in every respect; smokes moderately and drinks an occasional glass of wine.

Eighteen years ago he had an attack of severe pain in the left side of the abdomen, the paroxysm lasting about six hours, and attributed by his attending physician to the passage of a renal calculus. With this exception, he does not remember to have had a pain or an ache in his life until his present illness.

About ten years ago he began to have hemorrhoids, which, about six years ago, commenced to bleed and annoy him; but he could, and always did, return them when they protruded. This summer (1880) they had to be returned a dozen times a day, and he then placed himself under the care of a physician in Bridgeport, Conn., and in the course of five or six weeks was cured by what he calls a "process of absorption." He has since been entirely free from all annoyance from this source.

In Sept., 1878, when in Geneva, Switzerland, he passed, at one single urination, dark-colored urine which he considered to be bloody. The urine was clear the next time he emptied his bladder, and so remained until the second week in November, when, at Nice, he passed a larger amount of blood than at Geneva. The next urination was again clear, and nothing further was noticed until, in going through the Pitti Palace, in Florence, in December, he experienced a sharp, burning pain in the end of the penis,

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which persisted for a day or two. He consulted Dr. Young, who said that the difficulty was due to the passage of uric acid crystals, and gave him alkaline treatment with *the result above stated.*

In Feb., 1879, at Rome, the urine remained dark for about a week, and deposited a mahogany-colored sediment. He was relieved by capsules of copaiba. In Leipzig, the first week in April of the same year, after a long carriage-ride over the pavements, he passed a larger amount of blood than ever before, but at no time suffered any pain while passing the blood. In Paris, the second week in April, the urine again became bloody, and so continued for about three weeks.

On April 28, 1879, he was carefully examined by Dr. Reliquet, who made the following diagnosis :—" Hémorrhoïdes. Congestion prostatique consécutive. De là le sang évacué spontanément avec l'urine." Dr. R., after careful examination, definitely excluded stone. On the theory of the diagnosis he was ordered to take Hunyadi Janos water every morning before breakfast, and a large rectal injection soon afterward, and sulphate and bicarbonate of soda three times daily. Thus the bowels were kept quite free and the urine alkaline ; but on June 3d the urine again became bloody, and so continued at pretty short intervals until Sept. 15th. Then it gradually diminished and the urine was only bloody for a day or two at a time at intervals of about a month, and has so continued ever since. A long railroad ride would always bring it on.

Up to July 10, 1880, he had never had any pain or soreness connected with urination, except as above stated at Florence. At this time he began to have, at intervals, scalding pain the whole length of the urethra, accompanied by a desire to pass urine, and more or less straining. Urination was followed by an uncomfortable aching, which lasted five to ten minutes. Belladonna suppositories afforded great relief. This condition of pain and aching persisted and increased in severity up to the time that I first saw him, Oct. 7, 1880, when he was suffering severely and almost constantly.

In December, 1879, he first noticed an increased frequency in urination, and this became more and more of an annoyance until the latter part of August, 1880, he was passing water about every fifteen minutes during the day, and was obliged to get up at about the same intervals during the night, though toward morning he might sleep an hour and a half or two hours. About the middle

of September he began to pass urine involuntarily and during sleep unconsciously.

Oct. 7, 1880.—Saw him late in the evening for the first time professionally, and found him looking haggard and worn-out from loss of sleep and constant suffering. Urine dribbling constantly and tenesmus well marked. As he thought that morphine affected him unpleasantly we gave him codeia for the night.

Oct. 8th.—Had a much more comfortable night than usual, as far as the amount of sleep was concerned, but dribbled constantly and is still suffering as before. Put him upon half-drachm doses of lactic acid and washed out his bladder with a five-grain solution of the same.

The urine examined this morning contained quantities of pus; no considerable amount of blood; no casts; many crystals of triple phosphates; sp. gr. 1,008; reaction neutral; no sugar; a great deal of mucus; considerable epithelium; and after boiling, the addition of nitric acid, and standing six hours, the precipitated albumen occupied one third of the bulk of the urine used.

Oct. 11th.—The pus in the urine has largely decreased in quantity, and there is notably less mucus and epithelium, while its reaction is markedly alkaline.

Up to yesterday the patient kept passing gravel in small masses every hour or two, which on examination proved to be triple phosphates. The bladder has been washed out every day, though the process is more painful than with most patients. He says that his suffering is entirely changed in character and very much diminished, and the improved appearance of his face certainly corroborates his statement.

Oct. 12th.—Sounded him for stone with an entirely negative result. The passage of the steel instrument was effected without the least difficulty, and caused him very little pain; but on its withdrawal about an ounce of clear blood ran from the urethra and formed a firm clot on a cloth which received it.

Oct. 15th.—The constantly wet cloths in which the dribbling urine has been caught have made the head of the penis and the prepuce very sore, and the patient has therefore occupied the recumbent posture for the past twenty-four hours, and the urine has all been caught in a paper basin. We have thus been able for the first time to measure it accurately, and find that it amounts to 157 ounces, a larger quantity than we had supposed. There is very little pus now, but considerable ropy mucus the passing of which causes almost as much pain as did that of the gravel. No great

change in the urine except that to the naked eye the pus has almost disappeared, while the microscope still shows a few cells and some blood.

Oct. 16th.—In washing out the bladder to-day my attention was attracted by some small masses of tissue (apparently) floating in the fluid which now runs almost clear. These masses were examined by myself, and also submitted to Dr. Wm. Hailes, Prof. of Histology and Pathology in the Albany Medical College, who reports that "they are composed of papillæ, consisting simply of connective tissue, forming a support for capillary vessels which have their embryonic walls and terminate in loops in the ends of the papillæ." Neither he nor I could find any thing which was characteristic or even suspicious of malignity. Fig. i is a very accurate reproduction of the appearance of one of the portions examined, and all the rest were entirely similar.

FIG. I.

Several detached papillomatous growths found floating in specimens of urine. They consist principally of connective tissue, forming a support for capillary vessels traversing the papillæ, and resemble benign papillomatous growths.

Rectal examination shows the mass to lie above the prostate, to be of considerable size and occupy a portion at least of the sides as well as the posterior wall of the bladder.

Oct. 18th.—The quantity of fluid passed from the bladder has diminished to 113 ounces in the past day, having been yesterday 125, and the day before 130. On the 16th the patient suffered so severely that he was obliged during the day and night to take three quarters of a grain of morphine. His stomach was disordered thereby, and his tongue, which has been thickly covered with a brownish fur all the time, was worse than ever. Pulse, which has ranged from 100 to 120, is to-day 105. The temperature has been at all times from 98° to 99°.

Careful physical examination of the thoracic and abdominal

cavities reveals nothing. To-day he has taken no morphine ; has been more comfortable than usual ; has suffered no pain except when passing the little masses of tissue above referred to, or the ropy mucus, and the latter has still further diminished.

Repeated examinations of the fragments of tissue passed show no change in their character, and the diagnosis, therefore, seems justified of simple papilloma of the bladder.

Oct. 21st.—Mr. J. has gradually and steadily improved ; eats and sleeps better ; has much less pain ; and the amount passed from his bladder has diminished to 87 ounces. The amount of albumen varies from one fourth to one third, and no casts can be found at any time. The lactic acid has been increased to drachm doses three times daily, and the washing out of the bladder has been discontinued, because the operation causes him so much distress at the time and for an hour or two afterward, while the disappearance of pus from the urine has done away with the necessity.

To-day Prof. Wm. H. Van Buren saw the case with me in consultation, verified the diagnosis of vesical tumor, advised against an operation, but recommended the use of thuya occidentalis, from which he had derived much benefit in similar cases. He also agreed with me that notwithstanding the presence of large quantities of albumen in the urine there was no good reason to suspect any disease of the kidneys.

Nov. 5th.—Since last date the patient has eaten and slept well, is cheerful and bright, and but for his local trouble would feel as well as ever.

The amount of fluid passed from his bladder has varied from 106 to 76 ounces ; the proportion of albumen from one to two fifths ; no casts at any time ; occasionally a little blood ; sometimes a few pus corpuscles, sometimes almost none ; there is always considerable ropy mucus entangling quantities of crystals of triple phosphates. The urea has been frequently estimated by the hypobromite method, and has varied from .50 to .59 of one per cent. No more villi have been found though they have been carefully searched for. The incontinence of urine is a great annoyance to him.

A faithful trial was given to the thuya but without any improvement in the condition of the urine, or any relief to the patient. In fact he suffered so much more than when taking the lactic acid that he asked to go back to the latter, and did so with decided relief.

He has now almost no vesical tenesmus, but suffers pretty sharply when passing the masses of semi-coagulated mucus with the crystals entangled in them, which seem to scrape and irritate the mucous membrane of the urethra.

Dec. 19th.—There has been little change in the patient's general condition since last date, but he is somewhat better. For a few days he has sat up in a chair, partially dressed, for about half an hour at a time, and eats very well. The constant dribbling of urine is a great annoyance to him whatever position he may assume. He has lost some flesh, but has gained in strength.

No change worth noting in the condition of the urine. Though the specific gravity remains low and the proportion of albumen very considerable, there are no casts at any time. The daily amount has averaged 85 ounces, with a minimum of 50 and a maximum of 108. Another trial has been made of the thuya with the same result as before, and the remedy which gives him the most comfort is, without doubt, the lactic acid. He suffers most when passing only a small amount of fluid; and at such times digitalis and acetate of potassa or other diuretics always afford relief. The infusion of digitalis was the most reliable, but could not be long employed at a time on account of its interference with the action of the stomach.

Jan. 28, 1881.—No change in the urine worth noting. Patient has had three hemorrhages from the bladder, one of which was quite copious. The blood coagulated in considerable amounts in the bladder, and the passing of the clots was the occasion of paroxysms of pain so severe as to demand the hypodermic injection of morphine, in half-grain doses at night, to procure any rest.

The family are exceedingly desirous that an operation should be done to remove the tumor, if not accompanied by too great risk. They are driven to this by the agony which the patient suffers, and are encouraged by reports which they have heard of success in cases which are narrated as being of a similar character. I therefore yesterday consulted Dr. Van Buren again as to the propriety of trying it. The arguments in its favor are that the patient has an excellent constitution and is in very fair general condition; the only fragments of the growth which we have been able to obtain have proved to be simple papillomatous villi, without any evidence of malignity; and the statistics of the removal of such growths are somewhat encouraging. Dr. Van Buren was opposed to the operation on the grounds that the growth was too large to be entirely removed, and that he was sat-

isfied from the history of the case that the base of the growth was malignant. He thought it possible that at some future time the vesical orifice of the urethra might become occluded, and he would then advise the opening of the bladder, by the usual perineal operation, for the purpose of giving exit to the urine through a permanent fistula. If this had to be done he would then advise the removal, by tearing and scraping, of as much of the tumor as possible. Dr. Van Buren's advice was followed and no operation was attempted.

Feb. 24th.—The patient's sufferings have been relieved by morphine as demanded. He is worse in every way; the morphine interferes with his appetite and digestion and causes nausea and vomiting, though not as much as opiates given in any other way. Codeia and other drugs which do not interfere with the digestive apparatus exert no controlling influence over the pain. The morphine has been so objectionable that I gave to-night in its place fifteen grains of chloral hydrate with twenty of bromide of potassium.

Feb. 26th.—Mr. J. rested very well after taking the chloral night before last. Yesterday he suffered less pain than usual, and was notably dull and sleepy, though he could at all times be aroused and would then talk rationally and cheerfully. The drowsy condition was attributed to the chloral.

Last night, without chloral or any anodyne, he rested well, but this morning the drowsiness, which has considerably deepened, can not be attributed to any drug. An examination of the account kept of the amount of fluid passed from his bladder showed that it had diminished to an average of less than 55 oz. per day, and though there is no œdema of any portion of the body, there seems little doubt that the condition approaching coma in which he has lain for the past two days is due to uræmia. The administration of diuretics and sudorifics was therefore begun and a brisk cathartic given.

March 1st.—In consequence of the treatment the flow of urine has increased to an average of over 60 oz., and the bowels have moved freely. Of course the patient's condition is correspondingly better.

There seems no satisfactory way of accounting for the uræmia except on the supposition that the growth has occluded the orifices of the ureters and thus made pressure backward through them on the kidneys, impeding their action.

March 8th.—Up to the 5th inst. Mr. J. remained in very fair con-

dition, but suffering intense pain from the passage, at short intervals, of masses of coagulated mucus entangling large numbers of crystals. For the past few days the amounts passed have been as follows : March 2d, 47 oz. ; March 3d, 30 ; March 4th, 32 ; March 5th, 33 ; March 6th, 24 ; March 7th, 14 ; and to-day scarcely any—all this in spite of every effort made to effect an increase. Since the 5th he has been semi-comatose nearly all the time, aroused only when spoken to or by the paroxysms of pain. The suffering was so great that death, which came at 11 P.M., was almost a relief.

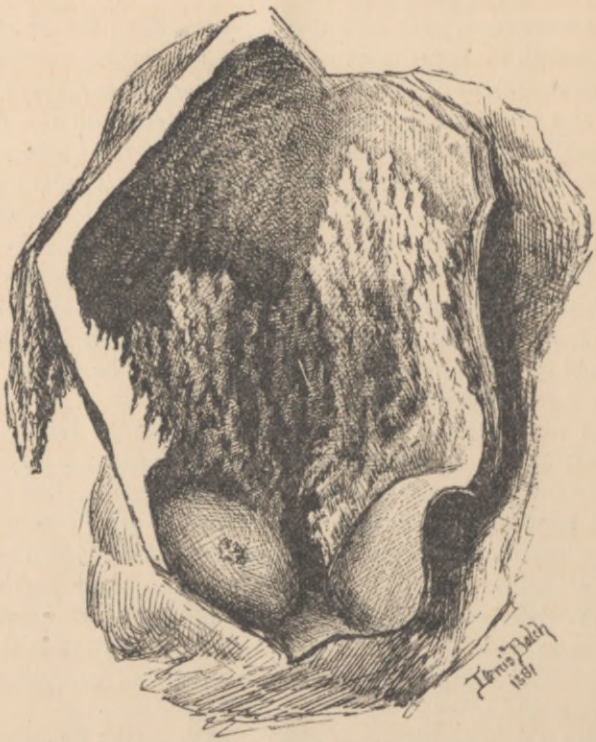

FIG. 2.

Gross appearance of bladder laid open by incision in anterior median line. Drawn by Dr. Lewis Balch.

Autopsy.—4 P.M., March 9th, 17 hours after death. Present, Drs. Vanderpoel, Sr. and Jr., Dr. A. Van Derveer, and Dr. J. S. Mosher.

General appearance, well-nourished. *Rigor mortis*, well-marked.

By request of the family the head and thorax were not opened.

Abdominal cavity opened by crucial incision. Omentum healthy and contained a fair amount of fat. Intestines healthy.

Bladder removed and opened by anterior vertical incision. Walls thickened; interlacing columns, formed by hypertrophied muscular bands, well marked; mucous membrane at the base covered with a soft cauliflower growth, extending all around the neck and up on each side—rather more on the left than on the right—so that one half, or perhaps a little more, of the internal surface of the bladder was covered with it. Orifices of the ureters entirely concealed by the growth and their lumen obscured by the neoplasm.

Both ureters were filled their whole length with urine and dilated to about half an inch in diameter, so as to easily admit the end of the little finger.

Left kidney: pelvis very much dilated, connective-tissue capsule quite adherent, cortical substance and pyramids apparently free from disease. Right kidney: apparently healthy, capsule not adherent, pelvis greatly dilated.

Not the least trace of disease was found in any of the other abdominal organs.

The heart was examined through an opening in the diaphragm and found normal.

Fig. ii, for the drawing of which I am indebted to my friend, Dr. Lewis Balch, gives a very correct idea of the appearance of the bladder and extent of the disease.

Remarks.—The most important point to determine in this case, in relation to advising an operation, was the exact character of the growth. There was no history of malignant disease in any individual of any branch of the family. The patient himself was entirely free from any cachexia; had, as far as careful examination could detect, no disease of any other organ; had always been perfectly healthy, with the exception of the supposed passage of a renal calculus eighteen years ago, which had never been repeated, and the hemorrhoids of which he had been entirely relieved when I first saw him. His bladder trouble dated back just two years to a passage of bloody urine, and that had been

repeated on numerous occasions. There had been entire absence of the pains said to be characteristic of malignant disease, indeed there had been no pain worth mentioning until the attack of acute cystitis during which I first saw him. Then portions of the mass obtained in washing out the bladder and subsequently in the urine proved, on careful microscopical examination, to consist of simple papillomatous villi, without a trace of any thing malignant. All this pointed to the existence of a benign growth which was the source of the hemorrhages, but which, could it be safely removed, would not, in all probability, return. The large size of the growth and its soft character as determined by rectal examination appeared to be the only sign pointing to any thing else. Yielding to Dr. Van Buren's clinical experience and declining an operation was proved by the autopsy to have been eminently judicious. Fig. i shows the exact appearance of three of the fragments obtained during life, and none of the others differed essentially from these. After the autopsy a portion of the tumor was sent to Dr. Hailes, who, with the aid of his freezing microtome, got sections through the whole length of these papillæ and the wall of the bladder from which they sprang, shown in fig. iii, and which could probably scarcely have been obtained in any other way. It is easily seen that the infiltration of malignant elements extends only a short distance up into the papillæ, and explains how the portions we obtained during life gave false evidence of the character of the growth as a whole. Fig. iv shows a portion of the infiltration still more highly magnified.

Another study of great interest in connection with this case was that of the urine. During the last four months and a half of Mr. J.'s life the average amount of fluid passed from his bladder each day was in round numbers 90 oz., the specific gravity of which stood very steadily at

FIG. 3.

Is a section through the mucous membrane of the bladder, showing two large dendritic papillary vegetations implanted upon a carcinomatous base, and resemble benign papillomata, except near the base.

FIG. 4.

Encephaloid carcinoma, showing well-marked alveoli, with the large epithelial cells of encephaloid disease. This field was taken from near the base of one of the papillæ shown in fig. iii.

1010. After boiling, and the addition of nitric acid, the precipitated albumen occupied, after standing four hours, from one-third to three-fifths of the bulk of fluid used. Repeated and careful examination failed to show a single cast at any time. The urea varied from one-half to six-tenths of one per cent., which, considering the amount of fluid passed, was just about normal. There was not a single rational sign of any form of Bright's disease, and Dr. Van Buren's reply, when questioned on this point, was: "I will stake my professional reputation that the patient has no organic disease of the kidney."

I have no doubt that a large part of the fluid passed from the bladder was albuminous liquid exuded through the thin walls of the infinite number of villi constituting the exposed portion of this growth. The examination of a small portion of the fluid taken from the distended ureters at the autopsy supported this view, for it contained only a distinct trace of albumen and no more—less, in fact, than might have been expected considering the mode of death.

An interesting point in connection with the mechanical distention of the ureters and pelves of both kidneys, was that the same condition was found, on microscopical examination of the kidneys, to exist in the tubuli uriniferi, though the organs appeared to the naked eye to be healthy.

The persistent existence, then, of a large amount of albumen in the urine, without casts, without diminution of the total amount of urea excreted, and without rational signs of Bright's disease, might in other cases prove a valuable early diagnostic sign.

In the treatment of the cystitis, which was at first a very painful complication in this case, lactic acid gave more relief than any other drug, and its value has been attested in many other cases in my experience. For the suggestion

as to its use I am indebted to an article in the *Buffalo Medical and Surgical Journal*, for Feb., 1879, by Mr. Theodore Deecke.

The entire freedom from disease on the part of all the other organs of the body, and the fact that the recto-vesical septum was not invaded, were noteworthy.

I imagine that the mode of death by occlusion of the orifices of the ureters and the production of uræmic coma must be rare, for I do not find it recorded in the history of any case that has come under my notice. The probability of its having occurred was, in this instance, foreseen about a week before death.

The diagnosis from the *post-mortem* examination of the bladder, ureters, and kidneys would be carcinomatous papilloma of the mucous membrane and walls of the bladder, with hydronephrosis of both ureters and kidneys. There was also a marked dilatation of the straight and convoluted tubules in the medullary and cortical portions of the kidneys.

The soft papillomatous growth resembled cauliflower excrescences, and involved fully one half of the internal surface of the bladder, extending from the neck to the *bas fond* and sides.

This report, the micsoscopical examinations, and drawings were all kindly made by Dr. William Hailes, Jr.

Literature.—The treatises on general surgery all devote a few pages, more or less, to the consideration of tumors of the bladder. They all agree in dividing them into benign and malignant.

The names bestowed upon the varieties of the former class differ very considerably, and are founded rather on the results of microscopical examination after death, or in a few cases after removal, than on any possible clinical diagnosis. It is admitted on all hands that the growth

variously known as papilloma, villous papilloma, villous tumor, and vascular tumor, is the most common, and that simple fibroids, mucous polypi, and fibro-myomata occasionally occur.

Of the malignant growths encephaloid, scirrhus, and epithelioma are found, though authors do not agree as to their relative frequency.

As to the value of microscopical examination of portions of a tumor of the bladder obtained in the urine during life authors differ. Sir Henry Thompson, in his Clinical Lectures,[1] is cautious, basing his lack of confidence on the fact that there is no characteristic "cancer-cell," so-called. He speaks, however, of having "detected under the microscope the peculiar structure which the processes of the villous tumor present to the eye."

Harrison[2] says "the microscope is most valuable in detecting small portions of genuine villous growth," and the majority of authors speak as if finding such villi, free from any evidence of malignancy, would settle the diagnosis. In the case now reported a number of such villi were found, and yet the autopsy showed that any effort to remove the tumor by operation could have resulted in no good, in consequence of its nature.

Harrison says, at p. 361, that "tumors presenting some of the appearances of these villous growths, but of a malignant nature, are occasionally met with." But the distinguishing points which he mentions, such as induration, tendency to involve neighboring organs, implication of glands, and cachexia, were all absent in this case.

Gross[3] says that papillary fibroma is frequently confounded with villous carcinoma, but we do not find that he

[1] London, A. & A. Churchill, 1876, pp. 351.

[2] Surgical Disorders of the Urinary Organs, Wood & Co., 1881, p. 358.

[3] Diseases, Injuries, and Malformations of the Urinary Bladder, Henry C. Lea, 1876, p. 136.

any where mentions the possibility of what occurred in this case—that the base of the tumor proved to be a carcinomatous mass, originating in the bladder, not extending to any other organ, and covered all over with a growth of benign villi.

Gant[1] says nothing on this point.

Mr. Coulson,[2] in his admirably complete book, says "there can be no doubt that malignant growths occur, springing from mucous membranes, and having their surface covered with shaggy projections." Mr. T. Holmes[3] says, in two lines, "a cancerous tumor may also sometimes be covered by villous processes of mucous membrane."

The lesson to be learned from this is that Sir Henry Thompson's caution to his students is eminently sound: "Most valuable as is the microscope in this great class of maladies, ranking next and very near to the sound itself, never let it obscure for you those broad features of the case which are to be determined by the unassisted eye and touch."

On the subject of the persistent albuminuria which was present in this case the general feeling of the profession is well laid down by Dickinson.[4] He says that albuminuria may be artificially produced by the ingestion of a large quantity of highly albuminous food; perhaps by a rapid absorption of a large amount of serous fluid from the pleura, and some exceptional forms of hepatic disease. "With this exception, it may be stated, as a rule, that when the urine contains albumen the kidneys are abnormal either in circulation or in structure."

Yet here is a case in which we think that a great and per-

[1] Frederick James Gant, Diseases of the Bladder, Lindsay & Blakiston, 1876.

[2] Walter J. Coulson, Diseases of the Bladder and Prostate Gland, Wood & Co., 1881, p. 116.

[3] Treatise on Surgery, Henry C. Lea, 1876, p. 770.

[4] Treatise on Albuminuria, Wood & Co., 1881, p. 11.

sistent albuminuria did not depend upon any form of kidney trouble.

The only reference we have been able to find to this point is in Mr. Coulson's book.[1] He quotes Dr. Ultzmann as pointing out in an article, *Ueber Hæmaturie*, in the *Wiener Klinik*, May, 1878, the fact that "in cases of villous tumor the urine always contains more albumen than corresponds to the blood or pus in the sediment." He accounts for it in the same way that we have in this case, though Mr. Coulson's book and this reference came under our notice long after the first part of this article was written. Dr. Ultzmann further points out the fact that fibrine sometimes appears in the urine under the same circumstances and from the same cause.

Gross mentions the possibility of death from uræmia from occlusion of the orifices of the ureters in the pelvis of the kidney. But we have not happened to notice the occlusion of the ureters at their entrance into the bladder.

The following histories of cases, more or less similar, related in medical journals, have come under my notice:

1.	*American Journal Med. Sci.*,	vol. 16,	1835,	page	522.
2.	"	"	7, 1844,	"	122.
3.	"	"	Oct., 1874,	"	561.
4.	"	"	Oct., 1879,	"	579.
5.	"	"	July, 1880,	"	233.
6.	*Dublin Journal Med. Sci.*,	vol. 16,		"	333.
7.	*Medico-Chir. Review*,	"	19, 1831,	"	453.
8.	*London Lancet*	"	1, 1849,	"	43.
9.	"	"	1, 1850,	"	188.
10.	"	"	1, 1854,	"	212.
11.	"	"	2, 1880,	"	978.
12.	*British Med. Journal*,	"	1, 1879,	"	854.
13.	*Med. Times and Gazette*,	"	1, 1879,	"	710,
14.	*N. Y. Med. Record*,	"	8, 1873,	"	342.
15.	"	"	14, 1878,	"	395.
16.	"	"	16, 1879,	"	82.
17.	*N. Y. Med. Journal*,	"	20, 1874,	"	62.
18.	"	"	21, 1875,	"	503.

[1] *Op. cit.*, p. 188.

19. *N. Y. Med. Journal,* vol. 23, 1876, page 299.
20. " " 27, 1878, " 166.
21. " " 28, 1878, " 629.
22. *Archives Générales de Méd.,* " 1, 1876, " 489.
23. " " " 1, 1877, " 233.
24. *Medical News and Abstract,* 1881, " 854.

ARCHIVES OF MEDICINE FOR 1881,

A BI-MONTHLY JOURNAL,

Edited by Dr. E. C. SEGUIN, with the assistance of many prominent physicians in this country and abroad, enters upon the third year of its existence.

The **Archives of Medicine** will continue to be published every two months.

Each number is handsomely printed in large octavo form on heavy paper, and contains from 104 to 112 pages. The articles are illustrated by means of lithographs or wood-cuts wherever necessary.

It is intended to devote the whole of each number to original matter, consisting of original communications or editorial articles, reviews of books, and a record of important cases.

The Abstract Department has already been omitted in two numbers. The principal reason for this change is that the editor believes that the profession are ready to support a journal devoted to original communications and *bona fide* reviews.

Especial attention is given to the review department, and while every pains is taken to secure the services of unprejudiced reviewers, they are asked to criticise or praise without fear or favor and to assume the responsibility of their statements by appending their initials to the reviews.

The following *Editorial Articles* have appeared during the year 1880: Mr. Lister's Antiseptic Method, by Dr. LEWIS A. STIMSON; Our Asylums as seen by a Competent Foreign Visitor, by Dr. VON DEN STEINEN; Observations on the Insane Asylums of California and Nevada, by Dr. R. W. BIRDSALL; The Right of the Insane to Liberty, by the EDITOR.

Among the *Original Articles* may be mentioned the extensive papers by Dr. N. M. SHAFFER, On the Hysterical Element in Orthopædic Surgery; by Dr. MARY PUTNAM JACOBI, On the Use of the Cold Pack, followed by Massage, in the Treatment of Anæmia; and Dr. AMIDON's Prize Essay on the Temperature of the Head.

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