ON A CASE
OF
TUMOUR OF THE BLADDER (IN THE MALE)
SUCCESSFULLY REMOVED THROUGH A PERINEAL
SECTION OF THE URETHRA;
WITH REMARKS ON THE APPLICABILITY OF THE
OPERATION IN CERTAIN CASES.

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THOMAS READING, æt. 29, consulted me July 26th, 1880. I learned that eight years previously he had passed “a piece of gravel the size of a pea.” After this he felt nothing unusual until three years ago, when his micturition became more frequent, and was followed by pain in the end of the penis, also occasionally blood appeared in the urine, especially after exercise.

With these symptoms, I sounded the patient, and I found a small calculus, which on August 5th was easily crushed and removed. It was composed of oxalate of lime.

Very little improvement followed the operation; the

bladder was not quite emptied by the natural efforts ; the gum catheter was used daily, and on two occasions gave signs of the presence of something in the bladder, which a subsequent exploration of the lithotrite did not discover. Such results were unusual and somewhat puzzling. Being relieved, he resumed his employment, and was occasionally seen relative to the still existing slight symptoms, which, however, gradually increased.

On October 5th I examined the bladder, and removed a quantity of phosphatic deposit with the lithotrite. I then seized what at first felt like calculus, and partially crushed under pressure ; but it was evidently fixed, giving me the impression that I was dealing with a portion of stone partially impacted, and that the remainder would be beyond my reach. More phosphatic matter being washed out, I decided to watch the result for a short time, and to open the bladder if necessary, as I have before done in cases of sacculated calculus. Accordingly, as after three weeks he had received very little benefit from the last operation, I decided to cut as in median lithotomy, and did so on the 6th of November, 1880.

Having introduced my finger well into the bladder, and pressure being made above the pubes, I soon recognised a tumour, about the size of a chestnut, growing apparently from the opposite wall or fundus, and somewhat to the patient's left, coated with phosphatic matter, and evidently the fixed body I had formerly seized with the lithotrite and denuded of its sabulous covering. Taking a pair of small forceps, I adjusted them to a full and firm hold, and then twisted off the mass without difficulty ; a small piece or two were subsequently withdrawn, but the tumour appeared to be entirely removed, and very little bleeding followed. He had no bad symptoms, made a rapid recovery, speedily regained good health, never having had any return of symptoms since the operation, now about fifteen months ago.

During that period I have seen him only two or three times so as to be assured of his continued health. He is

here to-night, and I should scarcely know him to be the same individual I first saw a year and a half ago, so greatly has he gained in flesh and strength.

Taking the excellent result of this case in connection with those described by Professor Murray Humphry in 1879, recorded in the 62nd volume of our 'Transactions,' the case of Billroth cited in the same paper, with another recently under the care of Mr. Davies-Colley, related by him at the Clinical Society in 1880,¹ all of them males, together with an example of tumour in the bladder of a female brought before this Society by Mr. Berkeley Hill during the present session, it is impossible not to arrive at an important conclusion respecting them. With such evidence, I think it will generally be conceded that certain tumours of the bladder are met with, not numerous it is true, although probably not so rare as they are generally supposed to be, which are capable of being successfully removed by surgical operation, but which are invariably fatal if left to follow a natural course. I do not hesitate to say, on reviewing my experience, that I have met with several cases apparently of disease of the bladder, but presenting obstinate and perplexing phenomena, with gradual tendency to grow worse in spite of treatment, for which I should now advise a careful exploration by perineal incision.

I have long known that it is not possible by any sound-
ing, however delicate, to diagnose with certainty during life the presence of villous growth, epitheliomatous formation, or soft fibrous tumour, which have been subsequently discovered by post-mortem examination. I refer to examples of all these in which such investigations have been carefully made by myself during life, and subsequently after death. And this fact I have emphatically stated in discussing the subject on more than one occasion in my written works. The presence of cancerous growths, when fairly developed, can, on the other hand, be ascertained during life without much difficulty. But the

¹ 'Trans. Clin. Soc.,' vol. xiv.

tumours before referred to always yield *débris* from time to time, both naturally and by washing out the bladder, and from microscopic examination of these specimens some light on their nature can be gained. I was much impressed by the autopsy of a patient whom I saw from time to time at considerable intervals during a few years, and who suffered severely, especially during the latter months of his life, about two or three years ago. On examining the bladder after death I found a tumour, as large as a moderate-sized apple, attached by a pedicle not a quarter of an inch in diameter. I regretted exceedingly that I had not opened his bladder and removed the tumour, which could have been done without any difficulty. The mass, although large, was very soft, and it was doubtless owing to this fact that I did not detect its presence as a tumour by examination during life. He passed small masses of villous growth, but thinking he was probably the subject of numerous small sessile flocculent growths of that nature, a common form, I never hoped to gain anything by opening the bladder.

I should no longer hesitate, in presence of a group of symptoms which to my mind suffice to suggest strongly the presence of such tumour, to advise exploration by perineal incision, for these growths invariably lead to a fatal issue sooner or later. Their course is sometimes very slow, but when it is rapid, and also in the later stages of their development, they produce extreme suffering. On the other hand, the operation advised is not a severe one.

The mere opening of the urethra, short of the neck of the bladder, by incisions in the line either of median or lateral lithotomy, does not involve a dangerous wound; the risks of lithotomy being occasioned much more by injury inflicted on the bladder itself in removing the stone than by the preliminary incisions made by the knife.

Perhaps of the two methods the median incision inflicts less mischief, and involves less risk than the lateral. For the purpose now under consideration the section should be strictly limited to structures external to the neck of the

bladder, which is barely to be approached with the knife. Such an operation amply suffices for exploration, as it would also, probably in four cases out of five, for removing any tumour discovered, although one of exceptional size might demand for its extraction a suprapubic operation, as in the case by Billroth.

The symptoms I have referred to as rendering an exploration of the bladder by perineal incision worthy of consideration in any given cases, may be thus sketched :

The patient, who is usually young or at middle age, is subject to attacks of hæmaturia, which are mostly slight at first, often with long intervals of freedom from bleeding. During the earlier stage it sometimes happens that no other sign of deranged urinary function is present besides the hæmaturia. It is to be observed that in the act of micturition the stream of urine may at its commencement be natural in colour and unstained, but that it may finish with a tint of bright red, a significant and important phenomenon in relation to diagnosis. In hæmaturia from the kidney the mixture of blood and urine is intimate and uniform throughout, and the mixture almost invariably presents a duller tint. The stage thus indicated may last from one or two to seven or eight years. Then, the act of micturition becomes more frequent and sometimes painful ; these characters appear irregularly, and by no means uniformly in amount and degree.

The pain is not necessarily aggravated, as in stone in the bladder, by active movements of the body. In later stages the pain is not necessarily severe, except from obstruction to the outflow of urine by clots. In cancerous disease pain is much more distressing ; at the same time indurated masses may be detected by either rectal or vesical examination, or by both. Free hæmorrhage, again, is not an evidence of the presence of calculus, but the contrary, the characteristic bleeding of calculus being slight, and directly corresponding to the amount of movement permitted to the body.

As the tumour progresses hæmaturia is more frequent

and more persisting, and blood is always to be found in the urine under the microscope.

Urethral obstruction causing retention sometimes takes place from the expulsion of portions of organised tissue, sometimes by the flocculent extension of a villous tumour, situated close to the neck of the bladder, being carried into it by the current, as I have seen on one occasion. Retention of urine more or less complete, with much suffering, may appear in the latter stages; while the patient loses flesh and treatment of any kind is ineffective.

With a case presenting such symptoms, the explanation of which appears not to be ascertainable except by the hypothesis of a growth, I think the question of making the opening described should be entertained. If no valid objection exists to the proceeding, it should be undertaken and the bladder should be explored. If after careful examination no tumour or other manifestly abnormal cause of symptoms is found, it will, I think, generally prove serviceable to adopt the following course:—A large india-rubber catheter should be introduced by the wound into the bladder and allowed to remain there, in order to withdraw all the urine by that route, perhaps for some days. This process is sometimes useful in chronic disease of the bladder by permitting the expulsive apparatus and the urethra to remain at rest for a period of time, by which means a healthier condition may be acquired, and after this the wound may be permitted gradually to close. If no improvement has taken place, it is at least almost certain that no injury can subsequently arise from the operation.

Mr. Stanley Boyd, lately Surgical Registrar of University College Hospital, has been good enough to examine a portion of the tumour from this case, and his report thereon, which is as follows, will conclude this paper.

“A small piece, taken from the surface of the tumour, was handed to me for examination. It was thickly encrusted with phosphates, and beneath these the surface was finely irregular. On section, the growth was firm and of uniform

consistence ; but its structure could only be guessed at as fibrous.

“ Microscopically, it consisted of fine bundles of fibrous tissue, having a general direction vertical to the surface. Small round cells were scattered pretty copiously at parts, especially towards the free surface, but there was no regularity in their distribution. The tumour is therefore a simple fibroma.

“ A knowledge of its structure could be obtained only by the examination of a considerable number of sections ; for in many parts the structure was very indefinite, and was rendered still more so by a cloud of fine granules which cleared up on the addition of acetic acid.