Remarks

ON THE

REMOVAL OF PROSTATIC ADENOMATA.

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THE remarkable series of operations for the removal of prostatic obstruction which Mr. P. J. Freyer has published in the *BRITISH MEDICAL JOURNAL* has aroused much interest in the subject. That interest has never been absolutely dead, nor indeed could it be in the presence of a widespread and distressing malady. The variety of methods of relief proposed in recent years shows sufficiently the earnest efforts made in this direction by surgeons everywhere. Yet it must be admitted that none of these plans has taken firm hold. The trial of them has been fitful. Here and there a small group of cases has been recorded, but the majority of surgeons have held aloof, while some others have declared the operation too dangerous to be generally adopted. McGill's early efforts in this country, brilliant and suggestive as they were, were marred in their development by his regretted death. It is not improbable that had he lived the operation which he practised would have been so modified by his experience as to have gained for it the widest acceptance. He saw, at all events, what was the true principle to be followed—a direct attack upon the obstruction, and not by the circuitous route of mutilating castration. That important principle has been followed by others, especially by Fuller, Belfield, Robson, Nicoll, and Moullin. But Mr. Freyer has given new life to the surgery of this region by the emphasis with which he has formulated his views, and by showing by his remarkable successes that it is possible to remove even the largest obstructions with a high degree of safety.

History of a Case.

In these circumstances, it may be interesting to place on record the short history of a case, in which, following Mr. Freyer, I successfully removed a prostatic obstruction some weeks ago. The patient was a gentleman aged 66, who for nearly fifteen years had suffered from frequent micturition, and who consulted me first about four years ago. Since that time he had been obliged to use the catheter two or three times a day, and on the occasions when he tried to empty the bladder without it the effort was prolonged and painful. The residual urine was from 3 to 4 oz. The prostate could be distinctly defined by the finger, the left lobe being the larger. He frequently inquired if an operation could relieve him, but I pointed out that while he could use the catheter I should not recommend one. Later on unilateral vasectomy was performed in London without benefit. Meanwhile the difficulty of catheterization increased. Quite recently he had a sharp attack of cystitis, and his general condition became so serious that I advised him to submit to removal of the obstruction by direct operation. He readily assented, being almost worn out mentally and physically. Assisted by Sir Thornley Stoker, Mr. Harvey, and Dr. Coleman, I opened the bladder above the pubes on February 15th. Two smooth lateral lobes were found projecting well into the bladder, with the catheter lying between. There was no middle lobe. The mass was lifted well up by two fingers of the left hand in the rectum; and the covering mucous membrane on the left side was divided so as to admit the finger tip. Keeping the nail close upon the mass it was slowly separated from its outer covering and the urethra, and extracted. This took about twenty-five minutes. The right lobe was removed in the same way in ten minutes. Each mass came out unbroken, and enclosed in a thin, white fibrous capsule. The bleeding on the left side was sharp, but was controlled by sponge pressure and hot boric lotion. Then a large drainage tube was placed in the bladder. No sutures or ligatures were used even in the external wound. The temperature rose to 100° on the second day; afterwards it remained normal. On the twenty-seventh day 7 oz. of urine were passed per urethram. He left bed in four weeks. He

can now hold urine for four hours in the daytime and for six hours at night, and he passes it in a normal stream, with full force. He describes himself as a new man. Dr. H. C. Earl has furnished a report on the specimens, as follows:

Microscopically the two tumours show a very similar structure. The glands are large and numerous, some being dilated into small cysts. There is no doubt that a hyperplasia of the glands has occurred. The tissue in which the glands lie is chiefly smooth muscle, with only a very small admixture of fibrous connective tissue. The dimensions are: Right, length 1½ in., width ¾ in., circumference 3 in.; Left, length 2½ in., width 1½ in., circumference 3½ in. Total weight about 7 drachms.

An interesting circumstance in the case was that the patient suffered intensely from pruritus ani. He had been twice operated on with the actual cautery by different surgeons. Another had stretched his sphincter so as to produce incontinence of faeces for a time. None of these procedures had given relief. I suggested to him that he might also be relieved of this trouble by the removal of the prostatic obstruction. For three weeks there was absolutely no pruritus. Then there was a slight return, but his present condition even in this respect is entirely satisfactory.

The Mystery of the Capsules.

In the controversy which arose on the publication of Mr. Freyer's lectures the statement that he had removed the prostate in its capsule was challenged. Some writers appeared to think only of the covering or sheath supplied by the recto-vesical fascia, and it was pointed out that if this were opened up or removed urinary extravasation must follow. Mr. Freyer of course never suggested that he did anything of the kind, but he adopted the term used by Sir Henry Thompson—"proper capsule"—to describe a structure distinct from the covering provided by the recto-vesical fascia. It is important to repeat his words here: "The proper capsule, which cannot be regarded as a mere offshoot from any adjacent fascia, but is a special envelope belonging to the prostate itself, although thin, is firm in texture, and defines clearly the form and limits of the prostate here."

We have thus far got two capsules mentioned in the dispute; but the confusion is hardly lessened when a third is described by Mr. Cuthbert Wallace.² He uses the term "capsule" in reference to an entirely different structure from either of those that I have referred to. Mr. Wallace's paper is a most valuable contribution. Starting from the point that the enlargement of the gland is produced by adenomatous growth, he proceeds to show that, at all events in some cases, the mass which is enucleated is not the entire prostate, but that that structure is left behind, thinned out by the intraglandular pressure of the adenoma, and can be so recognized *post mortem*. It is a little unfortunate that he applies the word "capsule" to this flattened covering of prostatic tissue, because it is "capsulating" in form only, due to pathological causes, and is not anatomical.

It is well, however, to note that the term "capsule" has been employed in reference to three different things, and it is necessary to make clear about which of them we are speaking. The first is the "proper capsule" (Thompson), indicated by Mr. Freyer; the second the layer of thinned prostate which remains in certain cases when a large adenoma is enucleated (Wallace); the third formed by the normal reflexion of the recto-vesical fascia.

Is it Possible to Remove the Entire Prostate?

Behind all this conflict of view, however, lie the questions whether in this and similar operations the prostate as a whole is removed, or indeed can be removed, or whether the part extirpated by the surgeon is only an adenomatous tumour developed within the gland; this last, squeezed out of normal shape into a thin covering by intraglandular pressure, being left behind.

I have read the letters published in the *JOURNAL* in criticism of Mr. Freyer's claim that he has removed several complete prostates. Regarding them merely as divergences of opinion they are somewhat startling, coming as they do from surgeons of high position and large experience. For the writers are by no means unanimous as to what they have done, or what they believe to be possible in operations for removal of prostatic obstruction. Mr. Mayo Robson says: "Even if it were possible to take away the entire prostate it would be unnecessary and undesirable, seeing that a removal of all the hypertrophies effects a cure of the disease." The implication

is plain that it is not possible to remove the prostate as a whole.

But it is somewhat confusing to find in the same letter these statements: "If Mr. Freyer will take the trouble to examine the specimens in the Leeds Pathological Museum, he will see that all the members of the staff have been performing enucleation of the prostate for years." Clearly one or other of these statements must be incorrect. Mr. Bruce Clarke has on "several occasions removed the whole prostate." Mr. James H. Nicoll says: "I have in my possession several complete prostates which I have removed by operation." Mr. A. R. Anderson: "For years past, when operating for prostatic enlargement, I have extirpated the gland completely." Samuel Alexander of New York,³ in describing his operation through the perineum, says: "The fibrous sheath of the prostate covering its posterior and inferior surface is broken into by the finger and the capsule entered: the entire prostate is shelled out from within its sheath by digital dissection." A. B. Johnson, J. Rogers, and Willie Meyer also declare that they have removed "the entire prostate."

There can be no doubt about the meaning of these phrases; but do they really represent what has been done, and have all these gentlemen and many others who need not be quoted been under a delusion as to what they did accomplish?

On the other hand, there is a strong body of opinion that removal of the entire prostate is impossible. Belfield is obviously in some doubt, for in a footnote⁴ he says: "The obvious etymological inaccuracy of this term (prostatectomy) is still of slight moment, since the real 'prostatectomy'—extirpation of the entire prostate—is as yet a rare experiment." Cuthbert Wallace⁵ says that the facts "leave no reasonable doubt that the so-called total prostatectomy is nothing more than the removal of adenomatous masses." Mr. E. Taylor is of opinion that Mr. Freyer has "done nothing more than remove encapsuled prostatic growths. A total extirpation would of necessity involve the removal of the prostatic urethra, to which there adhered in these cases a varying amount of prostatic tissue and which remained connected with the common ejaculatory ducts."⁶ Mr. Buckston Browne is "satisfied that it is impossible to entirely remove the prostate and at the same time leave intact the prostatic veins and capsule, urethra, and seminal ducts."⁷ To this side, also, must be added the testimony of Mr. Mayo Robson, who declares extirpation of the prostate, including its "capsule," to be impracticable from an anatomical point of view.⁸

It will be seen that these propositions are somewhat abstract, for in no case is it stated that, so far as the result of an operation is concerned, a subsequent examination of the parts has been made. This will no doubt be done in some fatal case in which the entire prostate is supposed to have been removed, and it will then be known whether this has been really effected. The evidence as to the impossibility of removing the gland is based upon the inspection of cases in the *post-mortem* room, no operation having been attempted while the individual was living. Sometimes preserved specimens have been examined, and sometimes normal prostates. Some experimenters have declared that their efforts to extirpate the gland have entirely failed, others have succeeded⁹; and Belfield quotes Vignard as declaring that experimenting on the cadaver he has "in six out of ten cases enucleated the entire prostate—hypertrophied or otherwise—with reasonable ease."¹⁰ The entanglement is not much cleared by these reports. It may be observed, however, that so far as facility of removal goes, we are not comparing like conditions. A normal prostate would certainly be more difficult to remove than an enlarged one, even in the dead body; and certainly we do not find in hardened jar specimens the conditions met with in dealing with a prostatic obstruction in the living.

The conflict of testimony is not a little perplexing. The opposition is based mainly upon the relation of the normal parts, but it is necessary to take into consideration also the influence of pathological changes which may make possible to the surgeon what is impossible in the view of the anatomist. Some of the opponents lay down certain conditions which they hold must attend extirpation of the entire prostate, namely, the concurrent removal of the seminal

ducts and the prostatic urethra. Accepting this as correct then, it may be truly claimed that the prostate can be completely enucleated, because in several reported cases the urethra and ducts have been so removed, and I understand that Mr. Freyer has deliberately taken away the urethra in some instances without detriment to the patients.

The controversy, however, has not much practical interest beyond emphasizing the importance of accuracy in the use of terms and in the description of operative procedures. To the patient, at all events, it is not of much moment whether we really do a prostatectomy or only remove adenomata. What he suffers from is the mechanical obstruction caused by the tumour, and he will not worry about fine distinctions of term if the surgeon can restore to him the functional ease of former days. In my own case I removed two adenomatous tumours, leaving behind, I believe, a layer of prostatic tissue representing the gland proper, but squeezed out of recognition by the pressure of the pathological growth. I have examined my patient quite recently, and nothing can be felt in the rectum to indicate a prostate at all, while the bladder function is as good as it was twenty years ago.

But whatever difference of view there may be upon the points to which I have alluded, there ought to be none upon the fact that Mr. Freyer has established the operation upon a stronger and wider basis than it has ever occupied, and that his advocacy marks a distinct advance in the surgery of the prostate.

REFERENCES.

- ¹ Sir Henry Thompson, *Diseases of the Prostate*, p. 3. ² BRITISH MEDICAL JOURNAL, March 29th, 1902, p. 765. ³ *Medical Record*, December, 1896. ⁴ *Internat. Journal of the Medical Sciences*, 1890, vol. c, p. 445. ⁵ BRITISH MEDICAL JOURNAL, March 29th, 1902, p. 774. ⁶ *Ibid.*, p. 774. ⁷ BRITISH MEDICAL JOURNAL, August 17th, 1901, p. 434. ⁸ *Ibid.*, August 10th, 1901, p. 383. ⁹ Roberts, BRITISH MEDICAL JOURNAL, March 29th, 1902, p. 769. ¹⁰ *Internat. Journal of the Medical Sciences*, 1890, vol. c, p. 449.

CHRONIC HYPERTROPHY OF THE PROSTATE: FREYER'S OPERATION: RECOVERY.

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CHRONIC enlargement of the prostate is rare in Southern India as compared with its prevalence in Europe. But that it does occur amongst Southern Indians is undoubted, and two or three cases of partial extirpation with great relief to the sufferers are on record.

I do not recollect reading of a case of total extirpation of the prostate in India, though doubtless the operation has been performed. The extremely unsatisfactory methods of dealing with chronic enlargements of the prostate hitherto in vogue have doubtless deterred most of us from attempts at a radical cure by extirpation. My own solitary case of partial extirpation died some weeks after the operation, having gained very little benefit from the operation.

The new operation recently devised by Freyer has revived the subject of radical cure of this affection, and his success seems to open up great possibilities for the future. I have called Freyer's operation a new one, notwithstanding the recent discussions in the BRITISH MEDICAL JOURNAL on the subject. I think any one who has performed his operation would do so. I have gone through the literature of the radical cure of the chronic enlargement of the prostate, all, I think, except that which is supposed to contain the statement that the operation now performed by Freyer was done years ago by a French surgeon. I shall be glad if any reader of this note will point out where the description of the operation by this French surgeon is to be found. Till I see this description I must agree with those who believe that Freyer's procedure is a new one.

As this operation is still, so to speak, under trial, I think it would be well if every surgeon who undertakes it published his cases, so that some idea of the mortality attending it may be formed. The operation is itself extremely simple, the removal of the gland is thorough; nevertheless, if it is accompanied by as high a mortality as the old method it will have to be set aside, and surgeons must still cast about for a method of treating this disease, a disease fraught with such misery to its victims. For this reason I now publish a case, in which Freyer's operation was performed by me.