CASTRATION FOR THE CURE OF HYPERTROPHIED PROSTATE.

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THE reception by the medical profession here and elsewhere of the suggestion made by me in June, 1893, that castration might be an effectual remedy for prostatic hypertrophy has been increasingly favourable. Up to that time no reference existed in surgical literature to the possibility of affecting the overgrowth by the removal of the testes. Since then, twelve more or less successful cases have been published. It is not too much to say that, in connection with the further corroborative evidence that has been brought forward, they serve to establish the operation as a rational and justifiable procedure. I have already reviewed¹ the history of eight of these cases.² The other four may be briefly summarised as follows:

Mayer and Haenel³ operated, May 16th, 1894, on a man about 70, with a much enlarged prostate, cystitis, and ammoniacal urine, tenesmus and toxæmia, in whom catheterism was becoming impossible on account of the pain it excited. There were several ounces of residual urine. Some improvement was noted in a few days; after two weeks the tonicity of the bladder began to return; in three weeks the urine was nearly normal; and in six weeks the prostate had shrunk to its proper dimensions, the bladder emptied itself completely, no catheter being required; urination was performed only once in four hours, and the urine was limpid and of acid reaction.

These authors discuss the apparent analogy between the prostatic and the uterine fibro-myomata (which was what led me to the researches that resulted in my suggesting the operation to the profession), mention my confirmatory experiments on dogs (which gave a definite and scientific basis for the suggestion), and after quoting Ramm's cases, arrive at conclusions entirely favourable to the method on account of its comparative safety and the ease of its performance as contrasted with the other operative measures directed against the hypertrophied prostate.

Moullin⁴ reported the case of a man, about 81, with complete retention due to a prostatic enlargement the size of an orange, with cystitis and failure of general health, and in whom catheterisation was impossible, the attempts being followed by hæmorrhage. Suprapubic aspiration was necessary on several occasions. After the castration the improvement was almost immediate, the prostate was appreciably smaller in ten days, and in three weeks had practically disappeared. An ordinary catheter could be readily passed. The bladder had begun to regain power. The urine was nearly normal.

J. I. Thomas⁵ reports a case in which castration in a patient of 65, who had had symptoms of prostatic hypertrophy for fifteen years, had caused "considerable improvement." He adds: "Urination which was formerly very frequent, is now necessary but three times a day." This report was made very soon after the operation, and no further details are given.

B. Ricketts, of Cincinnati, reports⁶ a case in which he did this operation in a patient, about 74, who left the hospital at the end of the sixth day. On the second day after the operation the patient could urinate with greater ease, and the pain was so slight that he said he had not had so much comfort for a year; he could sleep four hours at a time during the night, whereas formerly he had been getting up once every hour, and had been urinating thirty times daily. The condition continued to improve. A further report was promised later.

Launois⁷ publishes an interesting memoir reviewing the whole subject and bringing forward some collateral evidence, chiefly from the works of Godard, showing that monorchidism is apt to be associated with unilateral atrophy of the prostate, and giving instances of such atrophy after gonorrhœal epididymitis, and of complete atrophy in cryptorchis, after syphilis, sarcocèle, etc. He too concludes that the operation is of distinct curative value.

What might be called a supplementary indication for the operation will, I think, be found in some cases in which with the usual urinary symptoms of prostatic overgrowth there are others referable to the sexual system, and often causing more serious trouble. Every genito-urinary specialist is familiar with instances of "psychopathia sexualis" in old men, but not everyone realises that they often have a physical rather than a psychic basis, and depend on the prostatic congestion and excitation incident to the early stages of hypertrophy. In one of Haynes's cases the relief experienced in this direction was as marked as that derived from the disappearance of obstruction.

The details of several successful operations performed here (Philadelphia) will shortly be published.

The objections to the operation met with in practice have in my experience arisen altogether from the sentimental side of the question. As Launois says, men even of advanced age, "*aimant à se faire illusion*," insist upon retaining their testicles as evidence of a "*virilité passée*." This applies of course with especial force to the cases in which dysuria is slight or catheterism easy, the general health remaining unaffected. As to the more serious cases, such as those noted above, we have now reached a point in certainty of knowledge where we can promise results at least equivalent to those obtained by oöphorectomy for uterine fibroids, and I believe that the assertion I made in my original paper was correct, and that "there will be no lack of cases willing to submit to an operation almost painless, with a low mortality, and followed by no such unpleasant conditions as accompany persistent fistulous tracts, either suprapubic or perineal, even although the operation carries with it the certainty of sacrificing whatever sexual power has survived the excessive and often intolerable suffering of such patients."

CASTRATION FOR PROSTATIC HYPERTROPHY.

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FROM the commencement of "catheter life" to the death of the patient from bladder or kidney mischief, hypertrophy of the prostate gland is associated with so much worry and pain and danger that we should gladly welcome any means which offer relief from this distressing condition.

John Hunter¹ pointed out that the prostate of the perfect bull was much larger than that of the ox, and in more recent years the observations of Griffiths, Civiale, and others have shown that in man and animals removal of the testes prevents the development or produces atrophy of the prostate gland, according to whether the castration is performed before or after puberty. Mr. Harrison² also divided the vasa deferentia some years ago for the purpose of producing atrophy of the prostate; but the case was not followed up, and it was reserved for Professor White,³ of Philadelphia, to make use of these facts in suggesting that castration should be performed in order to diminish the size of an abnormally enlarged prostate, and he instituted a series of experiments on dogs in 1892, which fully confirmed his expectations of the influence of the removal of the testes in producing atrophy of the prostate. Since then these principles have been applied to prostatic hypertrophy in men, and with a considerable measure of success.

The following case, which will serve as an illustration, has recently been under my care at the Bristol Royal Infirmary:

W. M., aged 73 years, had suffered from difficulty and pain in passing his water for the past five years, and during the greater part of this period he was compelled to use a catheter to empty his bladder. On two previous occasions he had been admitted to the Infirmary for retention, and for the last two years there had been blood in his urine on various occasions. About six weeks before admission he was said to have had a "stroke," and since then all his bladder symptoms had been much worse. He got up about four times in the night to pass his water; there was considerable pain in the bladder, and the use of the catheter was constantly necessary. The day before admission he failed to pass his catheter, and he was brought to the Royal Infirmary on August 29th, 1894. A soft catheter was introduced, and the urine, which was decomposing and contained a large quantity of blood, was drawn off. By rectal examination the prostate was felt to be very hard and prominent, and about as large as an orange, and it was impossible to reach the top of it with the finger. The temperature was about 99.6° F., and the patient seemed very weak. After this it was impossible for two days to introduce a catheter, and the bladder was aspirated above the pubes.

On the third day I succeeded in passing a metallic prostatic catheter, which traversed the urethra for 9½ inches before the urine began to flow, the considerable depression of the handle which was necessary suggesting that the middle lobe, as well as the lateral lobes, was much enlarged. For about ten days his bladder was irrigated night and morning with boracic acid lotion, and, although the urine then contained very little blood and was less fetid, the prostate did not diminish in size, and the patient was getting gradually worse. The kidneys were presumably healthy, as the total amount of urea excreted daily was about normal. After the matter had been fully explained to the patient, I performed double castration on September 11th. In consequence of the decomposition of the urine it was necessary to continue the irrigation of the

¹ BRITISH MEDICAL JOURNAL, June 23rd, 1894.

² Haynes, 3; Smith, 1; Ramm 2; Powell, 1; White, 1.

³ Cent. für die Krankh. der Harn und Sexual-Organ, August 23rd, 1894.

⁴ Med. Press and Cir., September 16th, 1894.

⁵ Pittsburgh Medical Review, September, 1894.

⁶ Cincinnati Lancet Clinic, December 1st, 1894.

⁷ Ann. des Mal. des Org. Gén.-Urinaires, October, 1894.

¹ Quoted by White in Trans. Am. Surg. Ass. Phil., 1893, vol. xi, p. 167.

² BRITISH MEDICAL JOURNAL, September 23rd, 1893.

³ BRITISH MEDICAL JOURNAL, and Med. News, June 2nd, 1894, p. 601.