It therefore seems that there are no appearances presented by tumours removed from the prostate, and supposed to represent the whole organ, that cannot be accounted for equally well on the supposition that they are adenomata. On this theory the encapsulation, the ease of removal, the absence of bleeding, and the safety of the ejaculatory ducts, can easily be explained. These facts, taken together with the appearance shown in the various drawings, seem to leave no reasonable doubt that the so-called total prostatectomy is nothing more than the removal of adenomatous masses.

There are unfortunately some cases of enlarged prostate which do not present any easily separable tumours, and any attempt at removal simply leads to tearing portions of the organ away piecemeal. There does not at the present time seem any sure method of differential diagnosis between the two conditions before the actual attempt at removal is begun, though the projection into the bladder of a large asymmetrical tumour is, on the whole, the more favourable, since a large tumour is more likely to be caused by an enucleable mass than is a small or slightly projecting prostate.

In conclusion, I may say that Mr. Shattock has kindly given me his assistance in the examination and study of the specimens described from the Museum of the Royal College of Surgeons, and I am indebted to him for many suggestions made during the progress of the investigation.

The admirable and extensive collection of preparations in the College Museum has been of the highest value on arriving at the conclusions formulated in the paper.

I am indebted, also, to Mr. C. G. Seligmann for his help in the microscopy of certain of the specimens.

NOTE.

¹ This accords with the statement made by Virchow (Lecture 23), namely, that the process of enlargement in the prostate commences in general from the glandular parts, and that an increase of the stroma follows only little by little. Besides the glandular tissue such tumours necessarily contain fibro-muscular, and, to judge from the descriptions of writers on this subject, the latter tissue appears at times to be the chief, or even the sole, constituent.

TOTAL EXTIRPATION OF THE PROSTATE FOR RADICAL CURE OF ENLARGEMENT OF THAT ORGAN.

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I READ with much interest Mr. Freyer's clinical lecture on this subject in the BRITISH MEDICAL JOURNAL of July 20th, 1901, with the correspondence that followed; and I determined if opportunity arose to perform the operation as advocated by Mr. Freyer on the cadaver, and after removing the parts by dissection to study the results.

A suitable case was met with, and I opened the bladder suprapubically, a catheter having previously been passed and left in. Both lateral lobes were much enlarged, the enlargement having been sufficient to cause complete retention of urine during life. The mucous membrane covering the left lobe, which was the larger, was snipped through with scissors, the opening in the mucous membrane was enlarged with the finger, and the mucous membrane was peeled off the prostate. Then with two fingers in the bladder and a finger of the left hand in the rectum, the whole of the enlarged prostate was enucleated and removed. The finger in the rectum steadied the prostate, and the fingers in the bladder peeled off the sheath from the prostate, and by manipulations between the fingers it was easy to be sure that one was working completely outside the gland, and that only the prostatic sheath remained behind.

The abdomen was then opened and the parts removed *en masse*. The tumour consisted of the two enlarged lateral lobes of the gland joined by a fibrous band. The left lobe was the size of a tangerine orange. Its surface was smooth and lobulated, and was covered by a complete fibrous capsule. On section, it was seen to be made up of adenomatous masses, each with a fibrous capsule of its own. The right lobe was similar in structure though rather smaller. The fibrous band joining the two lobes was partially covered with mucous membrane, and this, together with a few shreds on the left

lobe was the only mucous membrane removed with the tumour.

The incision into the bladder was prolonged into the anterior wall of the urethra and the parts laid open.

Fig. 1.—A, mucous membrane of bladder; B, prostatic fossa; C, cut edge of mucous membrane; D, urethra; E, cut surface of bulb; F, small lobule of prostate left behind.

Fig. 2.—The prostate. The two lobes removed by operation.

The urethra was unaffected to the level of the openings of the ejaculatory ducts. From this level to the internal orifice where it was torn across the wall of the urethra was separated from the prostatic sheath, and lay quite free in the fossa left after removal of the gland. The ejaculatory ducts could be traced into this fossa where they had been torn. The cavity from which the prostate was removed was quite smooth except at one very small area where an adenomatous nodule had been left behind. It was completely lined by a fibrous layer outside which lay the prostatic venous plexus which separated it from the thin fibrous sheath derived from the pelvic fascia. The space containing the prostatic venous plexus was nowhere opened up and no extravasation of urine could have taken place. The preparation, I think, demonstrates that the whole of the enlarged prostate can be extirpated leaving the urethra intact and without danger of extravasation of urine.

I attempted to remove the normal prostate in the same way, but found it quite impossible to do so.

I am greatly indebted to Dr. Stock, the resident medical officer, for his drawings.

THE total number of students on the books of the University of Warsaw is 1,312, of whom 312 belong to the medical faculty.