

## Original Communications.

### RECENTLY OBSERVED FACTS RELATIVE TO THE PATHOLOGY OF THE PROSTATE.

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#### I.—HYPERTROPHY OF THE PROSTATE.

HYPERTROPHY of the prostate was long considered the natural inheritance of men in advanced life. Within the last few years, the grounds of this belief have been questioned by some observers. In 1855 and 1856, I prosecuted some researches on this question, and endeavoured to apply to it the numerical method, for the purpose of ascertaining, if possible, what proportion among elderly persons was affected with hypertrophy of the prostate. The result was, that I exhibited at the Medical and Chirurgical Society in 1857 fifty preparations, being the prostate glands from as many individuals. Of these, forty-three were aged 50 years and upwards (thirty of them being above 60 years), and all had been the inmates of a single metropolitan institution, from which they had been taken in the order of their appearance in the dead-house, without any selection of cases. From an examination of these specimens, it appeared that hypertrophy is an exceptional condition among elderly persons; that not more than one in three of this series were affected, as determined solely by anatomical examination; and that not more than one in eight had been the subject of any signs or symptoms of hypertrophy during life. (*Trans. Med. Chir.*, vol. xl, 1857.)

Subsequently my friend Dr. Messer, of the Royal Naval Hospital, Greenwich, pursued the inquiry; and, taking advantage of the great opportunities afforded by that noble institution, he obtained one hundred prostates from individuals of 60 years and upwards. The results of his examination, which corresponded in a remarkable manner with my own, form a valuable and interesting paper published in the last volume of the *Medical and Chirurgical Transactions*, and treating of the frequency, the nature, and the seat of enlargement, as well as of the frequency of symptoms, average ages of affected and non-affected, etc. (*Trans. Med. Chir.*, vol. xliii, 1860.)

Since that time I have continued the investigation, obtaining from the same field, through the kind assistance of my friends Dr. Fisher and Dr. Davis, thirty-four more specimens, which I have similarly dissected and examined, and which are now, with many others, preserved by me for other purposes, in the possession of the Royal College of Surgeons as wet preparations.

The total of one hundred and sixty-four prostates of 60 years and upwards, thus furnished, putting aside the twenty specimens from my first series which were below that age, may be regarded as presenting data sufficiently numerous to enable us to decide with an accuracy adequate to all conceivable purposes the proportion in which certain abnormal conditions affect the organ among men of advanced years. The results of the inquiry are extremely interesting in several particulars.

It may be premised, that all these organs were taken from the bodies of individuals of the required age, as they consecutively appeared in the dead-houses of the institutions alluded to; the object having been to obtain

average lives as they occurred in those classes of the community which are met with in such institutions.

The ages of the 164 individuals ranged between 60 and 94 years. The mean of their united ages was 75 years and a minute fraction.

Of these 164, 108 were absolutely free from any sign of hypertrophy; the remaining 56 were affected in a greater or less degree.

Of the 56 cases of hypertrophy, 26 were marked specimens; i. e., examples which weighed 10 drachms and upwards (10 drachms to 48 drachms). The other 30 were slighter, but undoubted examples, weighing less than 10 drachms.

Of the 56 cases of hypertrophy, nearly one-half made no complaint respecting symptoms during life.

It is to be recollected, however, that it is exceedingly common for slight deviations from the normal function to take place in elderly persons, without complaint being made; it is not, therefore, to be inferred that no symptoms of the existing enlargement were present. Most probably an inquiry would have elicited the fact that it was the habit of many of these patients to rise two or three times during the night to relieve the bladder, and that their frequency of micturition during the day was greater than that of the healthy subject.

From these data, therefore, it appears that actual hypertrophy of the prostate exists in about 34 per cent. of men at and above 60 years of age; and

That it produces marked symptoms in about 15 or 16 per cent.

The following results of the investigation are interesting.

The average age of the 108 individuals unaffected with hypertrophy was 75.02 years.

The average age of the 56 individuals affected with hypertrophy was 75.03 years. For all purposes, these two amounts must be regarded as identical.

The average age of those in whom the enlargement was considerable, 26 in number, was 74.46 years.

The average age of those in whom the enlargement was less considerable, 30 in number, was 75.53 years.

These results correspond very nearly with those obtained by Dr. Messer from his own cases alone.

It is most important to bear in mind that all these cases were placed in favourable hygienic conditions, and had the benefit of constant and careful medical supervision. Had they wanted both or either of these advantages, the result must have been greatly different, judging from the result of neglected cases among the poorer classes. Prolongation of life in the later stages of the affection depends mainly on the concurring existence of the two conditions named. This fact is one of considerable importance, and ought to be known to those who are the subjects of this complaint, since they are often prone to regard it as necessarily tending to shorten the natural term of life. They are entitled to the benefit which a more cheering view of their condition and prospects cannot fail in most instances to impart.

Among the 108 unaffected by hypertrophy were individuals of greater age than any among the affected portion; for example, 3 above 90, and many above 80 years of age. But, among the 56 hypertrophied cases, there were no less than 14 of 80 years and upwards, one reaching 87.

Besides the 164 cases thus analysed, were 20 specimens below 60 years of age, which formed part of the first series of 50. Among them were 13 cases between 50 and 60 years; only one of these exhibited any sign of hypertrophy; the age was 56 years; the enlargement was slight, evidently in the early stage, and affecting pretty equally the whole organ. I have never seen the affection at so early a period as 50 years of age. Enlargement existing before that age is unquestionably due to chronic inflammation, and is wholly different from hypertrophy.