Original Communications.

CHRONIC INFLAMMATION OF THE PROSTATE.

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THE affection which I recognise under this title is by no means an uncommon one, even in its simple uncomplicated form; and when it appears as a secondary condition to existing disease of the bladder and urethra, it is, unquestionably, one of frequent occurrence. Nevertheless, its existence is barely recognised by some well-known writers on prostatic disease, and by some it is not even named.

Chronic prostatitis is met with in three different phases; but the symptoms and pathological characters are much the same in each, and differ in degree rather than in kind.

It may solely originate in an attack of acute prostatitis, and be due to a morbid persistence of unhealthy action, which shows no disposition to diminish after the acute symptoms have subsided; or, secondly, there may be a long and tedious resolution, naturally leading, but by slow steps, to the reestablishment of healthy action; or, finally, the condition may commence in the chronic form, independently of any acute attack, in which case it may be the primary or sole existing complaint, or it may be dependent on disease of adjacent organs.

It is exceedingly common to meet with instances in which simple chronic inflammation of the prostate, producing enlargement, is regarded as an example of hypertrophy. Yet nothing can be more distinct than the two affections, if we compare their pathological history and characters. Chronic inflammation, however, by no means necessarily causes enlargement of the organ; indeed, it is rather exceptional than otherwise to meet with it, all varieties considered. But when inflammatory enlargement does exist, it is almost invariably in the early or middle periods of life, while hypertrophy never occurs before the fiftieth, very rarely before the fifty-fifth year, and is not commonly manifested by symptoms before the sixtieth year. Inflammatory enlargement is almost invariably preceded by some urethral inflammation. Urethral discharge of a purulent nature, urine containing numerous shreds or floculi, and pain during and after micturition, have been or still continue present. Associated with these there is almost always an impaired condition of the general health. All these may be, and usually are, absent in hypertrophy, during its earlier stages. Finally, inflammatory enlargement is due to the effusion of morbid products, lymph, pus, etc., into the substance of the organ; while a hypertrophic enlargement is due, as the term implies, to simple over-production of the normal constructive elements of the prostate gland itself.

CAUSES. The most fertile cause of chronic prostatitis is gonorrhoeal inflammation which has extended backwards, and has affected, more or less acutely, the prostate. Local cold and damp must be recognised as occasionally producing it; more rarely still it is due to mechanical injury inflicted on the urethra, or on the perineum. Long continued indulgence in venereal excesses of any kind is undoubtedly a cause. That form which results from long standing and severe stricture of the urethra, of chronic cystitis, of calculus either vesical or prostatic, is common enough, and needs no separate consideration; it is the mere result of existing adjacent disease, upon which it altogether depends.

MORBID ANATOMY. I have examined several prostate glands, which manifested a pathological condition resembling that which, when observed in other organs, obtains the name of chronic inflammation; such, for example, as occurs in lymphatic glands, superficial and deep, in the mesenteric glands, in the tonsils, in the uterus, and in the mucous membrane of the bronchi, stomach, intestine, and bladder. The prostate so affected may be found larger, or even smaller, than the natural size; for there is no necessarily constant deviation in this respect: the consistence, if any difference exist, is less firm, the texture is more open and spongy. The colour of the cut surface has a more dusky hue, sometimes with a redder tint. More fluid than natural is found in the gland-tissues, and freely issues on pressure. This fluid is of a dirty hue, and if firm pressure be made, appears to be stained slightly red. In advanced cases, deposits of pus are found, varying from the size of a grain of pearl sago to that of a pea; but they are few in number, perhaps only one or two are seen, thus contrasting with the numerous disseminated small abscesses met with the later stages of acute inflammation.

The mucous membrane may be thinned, and more vascular than natural, with the duct-orifices large; this being sometimes the case if there have been dilatation of the prostatic urethra, as happens behind a stricture. On the other hand, it may be coated in places with organised lymph, giving it a roughened and opaque appearance; or its own structures may be thickened, not reddened as in acute inflammation, but presenting after death a dull ashy grey, or even slaty hue, the last named marking long persistence of the unhealthy action. Pus is, in such cases, often found filling the sinus peculiaris, and the ducts entering the urethra, and sometimes a cavity filled with it communicates also with the urethra—a chronic abscess in the prostate; or if not in it, it is not uncommon to find abscesses surrounding, it in other words, periprostatic abscesses depending on foregone disease of the prostate itself.

SYMPTOMS. A patient who suffers from uncomplicated chronic inflammation of the prostate, complains of a little undue frequency in passing urine, of some mucopurulent discharge from the urethra, of dull pains in the perineum and about the anus, sometimes occasional, sometimes persistent, but almost always increased by exercise; often of pains in the thighs and legs, or in the sacral region, sometimes increased, but not invariably, by sexual intercourse. There is usually little or no pain in micturition, until the end of the act, when it is occasionally but by no means always felt, and then it is never very acute like that of calculus. There is tenderness in the perineum, sometimes felt in the sitting posture; tenderness in the prostate itself, to rectal examination; irregularity in form is sometimes detected by the finger; but this is exceptional, and there is not necessarily any enlargement. The passing of a catheter gives more than usual pain when it traverses the prostatic urethra and neck of the bladder. The urine is a little cloudy; but on examination this condition is found to be mainly due to shreds of tenacious mucopurulent matter, and masses of epithelium, which have their origin in the prostatic urethra, and not in the bladder; as may be ascertained by desiring the patient to pass urine into two glass vessels, the first ounce or so into one, the remainder into the other; when all the purulent matter will be found in the former portion, while the latter is clear. Further inquiry will frequently discover that there is little sexual appetite or power; the health is mostly impaired, and general debility is complained of.

TREATMENT of simple chronic prostatitis. When the dull pains about the perineum are pretty constant, and there is obvious tenderness of the prostate, both of these conditions being increased by exercise, I find nothing so

serviceable as counterirritation at the surface of the perineum. But it is necessary to continue it for a period of four to six, or even, sometimes, of eight weeks; and, if it be thus persevered in, benefit is almost certain to follow. It may be accomplished by rubbing a moistened stick of nitrate of silver on the skin in front of the anus, over the bulb of the urethra, so as to blister a portion of about an inch and a half long by one inch wide. The method, however, which I prefer, and now always employ, is an application to the part described, of strong acetum cantharidis in the form of "Bullin's blistering fluid"; the soreness to be kept up by the daily application of a piece of blistering paper, or by occasional reapplications of the fluid originally used. It occasions some trouble to the patient at first; but by keeping applied to the part an abundant supply of simple ointment, little pain is experienced after the first blistering. In applying the blistering fluid, care must be taken not to allow it to run downwards to the margin of the anus; nor should it come into contact with the scrotum. It is difficult to overrate the value of this treatment for the cases in question, provided it is used freely and perseveringly. At the same time, the state of the digestion must be improved, the vigour of the system be promoted by tonics and generous diet; and exercise is to be permitted and increased by degrees, as soon as the power of taking it without inducing pain is acquired.

The digestive organs being in tolerable condition, the use of iron is almost always attended with benefit. The sulphate, combined with sulphate of quinine, and made into pills with some extract of rhubarb, and a little extract of nux vomica, is an advantageous form of tonic for these cases, in which it is desirable to maintain regular action of the bowels, impaired as it usually is, by inability to take much exercise. A little of the watery extract of aloes can be combined, if it be necessary to employ more decided aperient action.

The tincture of the sesquichloride of iron in full doses is also a very efficient remedy, provided the bowels are not permitted to become unduly constipated. I prefer this form of iron to any other, including the recently introduced hypophosphites, for the great majority of patients suffering from this affection.

When there appears to be little or no active disease of the prostate, and we have only to deal with the sequel of a severe acute attack, in which convalescence is progressing, but very slowly, there is less positive indication for counterirritation to the perineum, although it is still calculated to be sometimes useful. One of the most prominent conditions in such a case is the persistence of enlargement and induration, due to inflammatory deposit which took place during the acute stage. This is the enlargement which belongs to the period of youth, and has before been pointed out as the condition so frequently confounded with the hypertrophy of advancing years, but from which it differs in every respect.

The improvement of which these cases are susceptible has also often been regarded as affording evidence that we possess the means of readily reducing by medicine the volume of a hypertrophied prostate; a conclusion which unhappily, at present, must be regarded as not supported by experience. In promoting absorption of the inflammatory products, the iodides and bromides are undoubtedly useful, and may be administered both internally and locally; always combining with their action every means which tends to improve the secretions, to nourish the body, and promote the vigour of the nervous and muscular systems. This treatment I have fully described in my work on the *Enlarged Prostate*, and need not enter further upon here.

CASE ILLUSTRATING THE ANTAGONISTIC EFFECTS OF OPIUM AND BELLADONNA.

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MRS. T., aged 55, anæmic and debilitated, was under treatment for some time with mitral disease.

June 16th. An emplastrum thuris cum belladonna was applied to the cardiac region, in the hope of quieting the excessive palpitation.

June 19th. She was seized with severe neuralgic pain. For the relief of this symptom, three doses of acetate of morphia, one-fourth of a grain in each, were supplied. The pain was absent in the evening; yet from some error of the attendant, one dose was given at 9 P.M., and another shortly after 12 P.M. The third dose was mislaid. It would seem that the patient slept heavily during the greater part of the night. She awoke about 6 A.M., and found four pills loose in the bed. Two of these she swallowed at once; the other two were retained untouched. She can give no explanation beyond saying that she took the dose in the hope of having more sleep.

June 20th, 7 A.M. Her daughter found her sitting up in bed, highly excited, "not herself at all". The face was flushed and dark; the eyes were very glistening. She was talking much and incoherently.

At 12 A.M. I saw her. The first thing that attracted my notice was the exceeding dilatation of the pupils, the iris being but a mere ring. The pulse was rapid and feeble; the heart's action was tumultuous to a degree. There was continual busy delirium, snatching at the bedclothes, etc. There had occasionally been a few minutes' drowsiness, but no sleep since she was first seen at 7 A.M. She complained much of dryness of the mouth and throat.

5 P.M. The symptoms were less marked, and she was much quieter.

The next morning, all traces of the excitement had disappeared.

Some days passed before the mystery of the pill found in the bed was cleared up. Some more pills were then detected by her daughter in the bed, and were submitted to me for inspection. In appearance and smell, they were identical with those mentioned as remaining from the first find on the morning of the 20th inst.; and more close examination showed the moral certainty that in both instances they had been detached from the plaister mass.

I have thought the above case worthy of notice not only because the facts are well authenticated, and because the testimony (of the daughter especially) is thoroughly trustworthy, but also because morphia and belladonna were present in the system together. Several observers have remarked the antagonism between these two drugs. Mr. B. Bell (*Edinburgh Medical Journal*, July 1858), after reviewing the history of what was then known on the subject, has given some cases where the subcutaneous injection of morphia relieved materially the symptoms of belladonna poisoning consequent on a similar use of a solution of atropine; and he refers also to a converse instance by Dr. Anderson, where the coma of opium-poisoning was mitigated by the internal administration of tincture of belladonna.

I believe that I have even recently met with some paper in one of the medical journals bearing on this matter, but I am unable to refer to it at this moment.

The symptoms of poisoning by belladonna were in this instance sufficiently well marked. The actual quantity of the extract swallowed, detached from the plaister on the chest, must have been very small; for not more than a drachm and a half was employed on the plaister three inches square. Dr. Taylor, in his work on *Medical*