CHRONIC LITTRITIS

BY

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Chronic inflammation of the glands of Littre is one of the common sequelae of acute gonorrhoea. It is of considerable importance not only to the individual affected but also to the community, since it may cause the infective state to persist or may provoke a non-specific leucorrhoea in the patient's sexual partner. It is largely, if not indeed entirely, due to improper treatment and is therefore preventable.

Signs and Symptoms

Urethral discharge, which is commonly slight in amount but may be profuse for longer or shorter periods, especially in neurotic patients, is usually most marked in the morning before micturating; its appearance is often intermittent. Microscopical examination shows tangled threads of mucus, epithelial cells, a few pus cells, and some bacteria; the urinary threads show similar appearances. Pus cells of polymorphonuclear type are not numerous, but may be more abundant during exacerbations. The bacteria are scanty as a rule; various types of cocci are seen, a few bacilli, and occasionally some coarsely spiral organisms; gonococci are not often found, but may be seen after certain provocative stimuli, such as coitus, the taking of alcohol, or the intracutaneous injection of aolan and similar products, or of gonococcal vaccine.

In a two-glass test urinary threads may be most numerous in, or even entirely confined to, the first glass. The most characteristic type is a very fine comma-shaped or "exclamation mark" thread. Ill-defined sensations of "burning" or "tingling" are reported by many patients; the sensations are localized in the penis, and are of course most marked in neurotic types. The complement-fixation test may confirm the diagnosis, but cannot exclude it. Enlarged follicles may be felt on palpation of the urethra over a straight sound, or seen with the urethroscope. They appear as small purplish-red points, which may be slightly raised or depressed. Sometimes a rather larger pit with thickened margins is seen at the site of an old follicular abscess. The most characteristic appearance, which is seen in well-marked cases, is that of a double row of enlarged follicles opening into the crypts in the roof of the urethra. Hyperaemic areas, with superficial erosion of the mucosa, may be seen in some cases.

Aetiology

The essential factor in causation appears to be improper treatment—that is, treatment in which the urethra is exposed to fluids at high pressure. Urethral irrigations may be given by means of a douche acting by hydrostatic pressure or by means of a hand syringe. The hand syringe was formerly widely used in the treatment of gonorrhoea, and although it has now been largely superseded by douches its use still survives, in particular with those patients who attempt self-treatment, but also with those practitioners who are only occasionally called upon to treat gonorrhoea, and who lack the more cumbersome apparatus—and have not a proper understanding of the very real dangers of the syringe.

The patient using a hand syringe can readily produce very high intra-urethral pressure; since the pressure depends on muscular action it is variable within wide

limits, and no objective measurement is possible. The pressure in the canal varies with that in the syringe inversely as the cross-section of the canal and of the piston of the syringe, and is of course a high multiple of that applied. The capacity of the ordinary syringe is relatively small, so that the urethra is washed with small quantities of fluid at a time. The use of the syringe is so often associated with attempts at self-treatment, or with treatment by those who are unfamiliar with venereal diseases, that it is not surprising that such patients often have not had routine blood tests for occult syphilis, or, satisfactory, or indeed any, tests for cure of gonorrhoea. Although clinical and serological findings show that syphilis is not a factor in the causation of chronic littritis, the two conditions are of course not mutually exclusive. Patients frequently maintain their misguided efforts with a hand syringe for extravagantly long periods; a history of daily syringing for over a year is not unusual. In many cases from six weeks' to three months' use of the hand syringe is sufficient to produce chronic littritis. The same may be said of the use of strong or unusual solutions—for example, strong permanganate solutions, hair lotions, mouth-washes, olive oil—but the lesion can be produced by the syringe alone without these additional errors.

Comparison of Cases

In a large series of urethroscopies, such as are performed at the Salford Clinic in the tests for cure in all cases of urethritis, there is a striking contrast between those patients who have irrigated correctly and those who have used a hand syringe; on the one hand a monotonous series of normal urethrae, on the other a large number of cases of chronic littritis. The patient may complain of vague discomfort referred to the urethra, he may have a slight discharge occasionally on rising in the morning, and the urine may show small threads. He often stoutly denies that he has ever had urethritis or used a hand syringe for the prophylaxis of venereal diseases. When one has seen with the urethroscope that he certainly has a chronic littritis, the confident assertion that he has used a syringe or a sudden question which takes him off his guard will usually cause him to admit the correctness of the deduction. It must again be emphasized that these patients are liable to exacerbations following coitus even with a healthy female; the damaged mucosa also seems readily to acquire non-specific urethritis. Thus when first seen the patient may have a subacute urethritis which masks the underlying condition. The question of acute gonorrhoea is investigated in the usual manner, and he is then treated for his subacute urethritis; when this subsides the true state of affairs is discovered. The influence of excessive pressure in producing chronic littritis is also shown by the fact that one occasionally meets with it in those patients who have used an irrigator of the hydrostatic type but with the reservoir excessively elevated.

Treatment

The patient must abstain from alcohol, highly seasoned dishes, sexual relations, and sexual excitement. The urethra is gently irrigated with weak solutions; the words "gently" and "weak" must be emphasized. A solution of 1 in 10,000 mercury oxycyanide or 1 in 10,000 chloramine-T may be used. The anterior urethra is then massaged, at first lightly, later with increasing firmness though never roughly, over a straight sound. Treatment twice in each week is directed not at forcible eradication of the disease but rather at gentle stimulation of the mucosa. It is to be remembered that the lesion is

structural, and that in a large majority of the cases there is no evidence of an actual persistence of gonococci. The use of strong antiseptics is irrational, and serves only to increase the mischief by further injuring the mucous membrane. The use of local heating by means of hollow bougies heated by a stream of warm water or by diathermy is unlikely to be of great value. In very resistant cases cautious dilatation with the straight Kollmann dilator may be tried occasionally, but no very striking results are obtained, and in careless or unskilled hands the instrument is a dangerous one. Vaccines or non-specific protein therapy may be given. The action of the vaccines is probably non-specific also, since serological and bacteriological findings suggest that actual gonococcal infection is usually no longer present.

The most satisfactory results are obtained by patient urethral massage over a prolonged period. Massage should not be applied if the urine is hazy. This shows that there is a subacute urethritis or a cystitis present; these may be differentiated by the usual methods. Daily irrigation for a week or two with the solutions already mentioned and the administration of an alkaline diuretic mixture, which may contain $7\frac{1}{2}$ minims of tincture of belladonna or one-half drachm of tincture of hyoscyamus to the dose, will usually clear up this difficulty. In a resistant case the mandelic acid treatment may be tried.

Tests of Cure

A common early effect of treatment is to increase the amount of discharge and the amount of pus contained in it. This need cause no alarm; it indicates that the follicles are being emptied and shows that the mucous membrane is reacting to treatment. Large palpable follicles become smaller, as may be observed with the urethroscope. If not already negative the complement-fixation test becomes weaker and ultimately negative. A case may be considered cured when an absence of the objective signs has been maintained for several months after the treatment has been suspended. Attempts should be made to provoke a return of symptoms by the intracutaneous injection of provocative agents—for example, 200 millions of a mixed vaccine of gonococci, staphylococci, *B. coli*, and streptococci, or of 1 c.cm. of aolan. It is not always possible in severe and long-standing cases to restore a completely normal urethroscopic picture, and in such cases relapses are to be expected, as the resistance of the mucous membrane is presumably lowered. It must also be remembered that some of these patients also suffer from a chronic "gonophobia," and may continue to complain of vague subjective discomfort. They return again and again to ask if they are "all right," they ask to have their cerebrospinal fluid tested, and ascribe herpes genitalis and many other things to their former indiscretions. Once one is reasonably satisfied that the organic basis of their symptoms is removed they are to be firmly reassured and if necessary referred for psychotherapy.

The complement-fixation test is not, as has been already stated, of much help in the diagnosis of this condition; it has complicated the question of cure in this as in other chronic sequelae of acute gonorrhoea. One sometimes finds that although all the other signs have cleared up in a certain case there still remains a greater or less degree of complement fixation. It is difficult to know what to do in such cases. Sometimes a negative test can be obtained after the patient has been given prostatic massage twice weekly in addition to his urethral massage for six or eight weeks, but whether this is *post hoc* or

propter hoc is another question. One feels uneasy at telling a patient who still does not give a clear negative test that he is cured, and, on the other hand, one hesitates to prolong treatment unnecessarily, particularly as this may have serious effects on the patient's mental state and may also lead to marital discord. The problem appears to have no completely satisfactory solution in the present state of our knowledge.

I wish to express my thanks to Dr. A. O. Ross, senior venereal diseases officer at Liverpool, who first drew my attention to this condition and to the part played by the hand syringe in its production; and also to Dr. Marinkovitch, venereal diseases officer for Salford, for his encouragement and for permission to publish this paper.

Clinical Memoranda

"Sympathetic Twins"

The element of pure coincidence or obscure aetiological association makes these cases worthy of record. The history involves X. and Y., male twins aged 41, both unmarried, and living together in one household.

On December 10, 1937, Y., a stout man of robust appearance, was sent into the Royal Victoria Hospital, Belfast, by me with a diagnosis of gastric or duodenal ulcer perforation. Laparotomy revealed a perforation of an apparently chronic ulcer situated at the junction of the first and second parts of the duodenum.

On the following day X., a thin under-developed man of haggard appearance, complained of epigastric pain and had a small haematemesis and melaena. Forty-eight hours later he presented signs of an acute abdomen. He was admitted to the same hospital, and laparotomy revealed a perforation of an apparently chronic ulcer at the junction of the first and second parts of the duodenum.

Both these men have been known to me for several years, and although they consulted me on occasions with vague dyspepsia neither had at any time signs or symptoms suggestive of duodenal ulcer. The existence of a duodenal diathesis is commonly seen in practice, and the tendency in this family is heightened by the brothers living together and being presumably subjected to similar gastronomic indiscretions.

I am assuming that my patients are dizygotic (dissimilar, fraternal) twins. I base this on the fact of their entirely dissimilar appearance and general build, the verified history that they never resembled each other at any period of their lives, and, finally, their complete dispositional and temperamental dissimilarity. Newman (1917) points out the difficulty of differentiating the type of twins in adult life and discusses Wilder's method of comparing friction—skin, palm, and sole patterns. In monozygotic or identical twins these show a pronounced similarity which does not exist in dizygotics. This is an elaboration of the methods used in criminology.

The coincidental occurrence of diseases in twins is but seldom reported in our literature, though it must be relatively frequent. Watson (1934), reporting the occurrence of diabetes mellitus in twins, refers to the fact that in recent literature the total number of recorded incidences of this association is twenty cases. He points out that practically all diabetic twins are of the monozygotic variety, and he discusses hereditary predisposition as an aetiological factor. Militzer (1935) reports gastric