DUODENAL ULCER AMONG MEDICAL MEN.

A COMPARISON OF THE RESULTS OF SURGICAL AND
MEDICAL TREATMENT.

BY

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ULCERATION of the duodenum has not been so long a diagnosable condition that the last word on its treatment has been said. More especially, the relative advantages of surgical and medical methods are still in debate. On the one hand, surgical opinion, as recently expressed, appraises medical treatment very lightly, and holds it to be powerless to prevent a recurrence of the symptoms in a very large number of cases. It maintains that the beneficial results of operations far exceed those obtained from any kind of medical treatment in respect to both cure and risk to life; that medical treatment entails a vastly greater mortality than that which follows operative treatment; and that patients who go without symptoms for two years after operation never develop them later. On the other hand, medical opinion persists in claiming for its own measures successful results in a very large number of cases, though not in all. It regards these surgical views as altogether too confident, and quotes its own everyday experience as showing not only that cases are curable without recourse to surgery, but that cases treated by operation all too often relapse and are little better than before.

How can the impartial onlooker hope to judge in a disagreement so acute? The merits of the question could be placed beyond controversy only if a series of cases, some treated surgically, some medically, were studied and the results watched over a period of years. But the likelihood of this being carried out in any clinical institution is small indeed, and the profession as a whole has probably reconciled itself to waiting many more years before the matter can be settled. Quite recently, however, evidence of the very kind that is needed has begun to appear from an unexpected quarter. Duodenal ulceration is attracting the attention of an impartial body of opinion altogether removed from the influences which conceivably might sway either of the two clinical camps. The various assurance societies have noted that this diagnosis is figuring more and more often on their books as the ground for life or sickness claims. As business undertakings they are now asking what this relatively new disease exactly implies in its financial aspects. How is it to be regarded from the standpoint of mortality and life assurance? Is it of small or great account from the point of view of sickness insurance? And how are the results of treatment of either kind to be expressed actuarially?

The first society to make known its experience in this connexion is the Medical Sickness, Annuity, and Life Assurance Society (300, High Holborn, W.C.1), whose policies are issued almost exclusively to medical men. Its statistics of duodenal ulcer are based, therefore, on that class of the community which can best command early and accurate diagnosis, and has readiest access to the most skilful treatment. Moreover, by the nature of its work its registers constitute a complete health record of each of its members, details of every term of sickness for which a claim has been made being entered over a period of years; in this way the after-histories of cases of duodenal ulcer have been traced with a fullness and accuracy which is impossible with hospital or even private cases. Against this must be set the fact that its figures, being drawn from a fraction of the population only, must be relatively small. An analysis of its records shows that during the first twenty years of its existence no case of duodenal ulcer appeared on its books, but that for the last twenty years the number of claims under this heading has steadily grown. These claims are mostly for sickness benefit, when the member has been totally incapacitated from practising, and as each sick member is free to choose whatever form of treatment he prefers the records show impartially the results, good or bad, of the alternative methods. Whether cure, relapse,

or death follows, the registers are concerned only to record the fact.

To summarize first the figures relating to all cases:

Total number of cases	59, involving 119 claims.
Average period of invalidity	... 4 months 3 weeks.
Longest period of invalidity	... 11 " 1 week.
Longest total incapacity in any one case	1 year 2½ months.

These figures show at once that, whatever the treatment adopted, duodenal ulcer means protracted illness. A patient, even under the best conditions, must expect to be laid aside for months before he can return to work. Even then, as the next figures show, the likelihood of a recurrence of the trouble is considerable.

<i>Relapses.</i>	
7 cases relapsed once	1 case relapsed 4 times
9 " " twice	1 " " 5 "
3 " " thrice	1 " " 7 "

Total of cases with relapses 22 = 37 per cent.

It would seem, perhaps, that in this tendency to relapse may be found an explanation of the conflicting opinions referred to above. A substantial majority of the cases, once they recover, suffer no further; but a large minority have a less fortunate history, and this irrespective of the treatment followed. Any method of treatment will be able to count its many successes, but will also need to acknowledge its failures.

If next the records are examined for the comparative results of surgical and medical treatment a highly interesting series of figures is obtained.

Cases operated on	... 33 = 56 per cent.
Cases treated medically	... 26 = 44 "

Roughly speaking, medical opinion, as voiced by medical patients themselves, is equally divided between the advantages of surgery and medicine, with a bias towards operation. To what extent this nicely balanced judgement is well founded can be seen in the next set of figures, which contrast the results in operation and non-operation cases.

	<i>Operation.</i>	<i>Non-operation.</i>
Total number of sickness claims	... 66	53
Average number of claims per case	... 2	2
	<i>Months.</i>	<i>Months.</i>
Average period of invalidity per case	... 5	4½
Longest single period of invalidity	... 11½	6½
Longest total of claims in any one case	14½	13

What little difference there is between the two groups may be expressed by saying that on the whole the cases treated surgically are rather longer before being restored to health. This is borne out by a comparison of all those cases where the total invalidity exceeded 5 months. Of the operation cases 11 were laid up for total periods ranging from 5½ months to 14½ months (5½, 6½, 7½, 7½, 8½, 9½, 11, 12½, 13½, and 14½ months); as against 3 non-operation cases where the periods were 7½, 9½, and 13 months respectively. In other words, exactly 33 per cent. of the operation cases were invalidated from work for 5 months or longer, as against 12 per cent. of those treated medically.

But even more important than this is the question of the permanency of the good effects of the two methods of treatment. Can it be shown that in respect to either of them the word "cure" is applicable in the sense of a permanent relief from the symptoms? The following are the figures bearing on this:

	<i>Operation.</i>	<i>Non-operation.</i>
No recurrence of symptoms in	19 cases (58%)	16 cases (62%)
After periods ranging from	... 1-12 years	... 1-11 years
Recurrence of symptoms in	12 cases (36%)	10 cases (38%)
After periods of	... 1-10 years	... 1-10 years

Here again there is nothing to choose between the two groups. Both show a high percentage of relapsing cases. Even ten years after the last attack a recurrence may take place—and this, interestingly enough, has happened in both operation and non-operation cases. This fact alone enjoins caution on physician and surgeon alike in claiming cures relatively soon after treatment.

Similarly, no great difference is found in the liability to relapses in cases belonging to the two groups.

Operation	... 1.7 relapses (average 2.1 per case)
Non-operation	... 2.4 relapses (average 2.8 per case)

It should be mentioned that of the 33 cases which were operated on, 4 came to re-operation after periods of 1 to 16 years.

Finally, there is the question of mortality. Here the results are:

	Deaths.
Operation	5
Non-operation	0

Two of these deaths immediately followed the operation. The absence of deaths among the non-operation cases is noteworthy, seeing that haemorrhage occurred fairly often. Probably this immunity can be accounted for by the peculiarly favoured position of medical men, as mentioned above, which ensures them prompt diagnosis and treatment.

To sum up, the special value of these figures extracted from the registers of the Medical Society is that, though they represent a relatively small series of cases, they are a business, and therefore impartial, record of the after-histories of the cases. They show that duodenal ulceration entails long periods of sickness, and, though not often mortal, is very liable to recur even after many years; but that the majority of cases recover after one attack, and remain free from relapses. The figures give no support to the claims to greater effectiveness of either surgical or medical treatment; on the contrary, they show that the results of the two methods leave little to choose between them.

From an actuarial point of view it becomes necessary to regard proposals for sickness insurance, where there is a history suggestive of duodenal trouble, as highly unfavourable. Such cases should be rejected as uninsurable, though in proposals for life assurance the risk is less.

GONORRHOEAL IRITIS.

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THE object of this short paper on gonorrhoeal iritis is to point out that, with correct and adequate treatment, not only can the disease in most cases be permanently cured, but, by clearly understanding its origin, entirely prevented.

The iris may be the only organ in the eye involved, but in the more intense cases the uveal tract, which includes the ciliary body and the choroid, and even the optic disc, may show signs of inflammation. The infection is endogenous, reaching the eye by the blood stream, but whether toxic or due to the direct action of the gonococcus has not been determined. The gonococcus has only once been isolated from the aqueous humour of the eyes and then only in a case of gonorrhoeal septicæmia; still I think that a disease of the eye which so constantly occurs with untreated or improperly treated gonorrhoea, and is so rapidly cured with the appropriate venereal treatment, can be definitely ascribed to this venereal disease.

According to some authors 8 and to others 20 per cent. of all cases of iritis are due to gonorrhoea. These statistics include the male and the female, but so convinced am I that if the cases occurring in the male subject alone be taken the percentage would be very much higher, that I never treat iritis in the male without carefully considering a gonorrhoeal history. Syphilis is, of course, a cause of iritis, but in my experience it falls very far behind gonorrhoea in the frequency with which it produces iritis in the male, and differs very considerably clinically from the gonorrhoeal variety.

Gonorrhoeal iritis is never seen during the acute stage of the urethritis; it may make its appearance some months after the gonorrhoeal infection or may be delayed for years. Only a few weeks ago I saw a patient who consulted me for an acute attack of iritis; he had had three previous attacks within the last three years, had received appropriate local treatment to the eye, but no attempt had been made to elicit a history of gonorrhoea, which I found, on questioning, he had contracted sixteen years ago. Dr. Kingston, to whom I referred him for opinion, found the gonococcus in the fluid expressed from the prostate, and this patient is now receiving appropriate venereal treatment. The Wasser-

mann reaction was negative, and I have no doubt that this is a case of gonorrhoeal iritis, which would have continued to recur had the venereal infection not been looked for. That sixteen years should have elapsed between the one and only attack of gonorrhoea and the appearance of the iritis is nothing extraordinary. How long the gonococcus can remain active in the posterior genito-urinary organs of the male is difficult to say, but it has certainly been discovered after a lapse of twenty-seven years, and now that more careful attention is being paid to its activities, and its presence more often sought for, I expect that even this long duration will be exceeded.

Gonorrhoeal iritis has certain definite characteristics, the most important being its tendency to recur. The term "recurrent iritis" is unfortunate, as if the venereal disease had been properly treated in the first place no iritis at all would have occurred, and if the first attack had been correctly diagnosed and adequate venereal treatment carried out the first attack would have been the last from this cause. I would emphasize the importance of regarding with suspicion all cases of recurrent iritis in the male and of endeavouring to persuade the patients to undergo a venereal examination.

The actual attack of iritis often differs but little from that produced by other causes, but is usually very severe, with considerable pain; its duration varies from a week or ten days to a month or more; it is often of a plastic nature, and this fibrinous exudate may be of such a degree that practically the whole of the anterior chamber is filled with a fibrous mass often greenish in colour; when this occurs it is said to be pathognomonic of gonorrhoeal infection, but its occurrence is far too rare to be relied on for a definite diagnosis. In those eyes in which a recurrence has taken place it is typical of a gonorrhoeal infection that, in the early recurrences, very little ocular damage has been done, and it is often only by careful examination that the results of a previous attack are demonstrated; in many cases nothing remains but one or two fine posterior synechiae binding the iris to the anterior capsule of the lens, and then often only seen on artificial dilatation of the pupil; but the damage, though slight at first, is constantly being added to by the recurrences, until in the later stages vision is very materially reduced.

In the differential diagnosis syphilis, rheumatism, tubercle, and sepsis must be considered.

In syphilis the iritis is, in the majority of cases, characteristic; it is either a secondary or tertiary manifestation, and does not show that pathognomonic symptom of the gonorrhoeal variety, for recurrences are not observed. If the attack occurs during the secondary period, if once recovery ensues, no other attack will occur until the tertiary period. Definite yellowish-red nodules, about the size of a pin's head, will be seen in many cases. These may be looked upon as papules or condylomata in the secondary stage, and in the tertiary as gummata. The attack lasts longer than the gonorrhoeal variety and leaves very marked evidence behind. The Wassermann test helps, but a positive reaction is not sufficient to exclude gonorrhoea. I have seen cases in which the original iritis was undoubtedly syphilitic and was cured by appropriate treatment, but in which later recurrent iritis was gonorrhoeal, though its origin was quite unsuspected and it was attributed to the original attack of syphilis.

It is to the condition known as "rheumatic iritis" that the gonococcus owes its long and undisturbed life in the past, for we now know positively that the vast majority of these cases occurring in the male are undoubtedly gonorrhoeal in origin. In the present state of knowledge it cannot be denied that rheumatic iritis does exist, yet I do not think many years will elapse before we can show that it is a comparatively rare affection and that gonorrhoea is responsible for most of the cases. It is, I think, a mistake to look for definite characteristics with gonorrhoeal rheumatism; it is true that certain joints tend to be affected, such as the knees, but in most of the cases that have come under my care for the ocular lesions, if they have had rheumatism at all it has been of a very vague character, not attacking any joints in particular and having a tendency to wander.

Most textbooks on eye diseases state that gonorrhoeal