Diverticular disease treated with corticotrophin

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SUMMARY. Since 1968 the inflammatory stage of diverticular disease (acute and chronic diverticulitis) has been treated with tetracosactrin in one practice. This paper reviews 100 episodes treated in this way and compares these with 50 episodes treated with rest in bed and dietary measures. Abatement of pyrexia, swelling and tenderness, as well as relief of the symptoms of pain and malaise, were usually found to occur within 24 hours of the administration of tetracosactrin zinc (1 mg) intramuscularly. No complications directly attributable to this therapy have been observed, while the duration of the clinical illness has been reduced by more than half. In neither group were antibiotics found to influence the outcome.

Introduction

DIVERTICULITIS is conventionally treated as a septic complication of diverticular disease, although there is no firm evidence that antibiotics exercise any beneficial effect.[1,2] This observation suggests the possibility of some other inflammatory factor in diverticulitis, and in 1966 it was decided to essay the use of oral corticosteroids.

Corticosteroids are widely and effectively used in the treatment of severe inflammatory bowel diseases such as acute ulcerative colitis and Crohn's disease. Since 1968 a number of episodes of acute diverticulitis, of which 100 are reviewed here, have been treated with tetracosactrin zinc.

Method

This study is based on a retrospective review of 153 episodes of acute diverticulitis occurring in 37 patients who were observed in one practice over a 30-year period. The average duration of the observation for each case was 14.4 years. Of these 37 patients, 13 were men with a mean age at onset of diverticulitis of 60 years (range 34–84 years) and 24 were women with a mean age at onset of 63.5 years (range 32–86 years).

All the patients had diverticular disease diagnosed by barium enema and the diagnosis of diverticulitis was made clinically on the basis of localized pain and malaise, with findings of tenderness, guarding and frequently a palpable mass, accompanied by fever and, in many cases, leucocytosis. The clinical observations were all made by one of two practitioners, and were recorded in detail for subsequent review.

From 1952–68, all cases were treated with antibiotics, the patients were put on a low-residue diet, hard stools were avoided and rest in bed was recommended during the period of symptomatic diverticulitis.

From 1968–82, most episodes were treated as soon as they were diagnosed with tetracosactrin zinc (1 mg, injected intramuscularly), and antibiotics were only given if clinical signs of recovery were not apparent within 48 hours. Unnecessary activity was deprecated but strict rest was not enforced. Rarely a second injection of tetracosactrin was given at 48 or 72 hours for persistent pain.

Results

Retrospective analysis of the case records of the patients treated traditionally and with corticotrophin did not reveal any difference in age, sex or severity of attack between the two groups. Many patients were treated by both methods, for different episodes.

Table 1 shows that symptoms or signs lasted for a mean of 10.9 days in the traditionally treated episodes, but for only 4.6 days in those episodes where corticotrophin was used. Three patients in the former group required surgery for intestinal obstruction, two having temporary colostomies and one colonic resection. One patient in the group treated with tetracosactrin required surgery — a pericolic abscess was drained three weeks after the onset of symptoms.

Table 1. Duration of attacks of diverticulitis.

	Traditional therapy			Corticotrophin therapy		
	No antibiotics	Antibiotics	Total	No antibiotics	Antibiotics	Total
Number of patients[a]	11	8	19	20	12	32
Number of episodes of diverticulitis	37	16	53	63	37	100
Mean duration of episodes (days)	10.7	11.1	10.9	3.9	5.8	4.6

[a]Several patients were treated differently for different episodes.

Case reports

Case 1

In 1966 a 56-year-old woman was the first to be treated with corticosteroids. She was being treated for a urinary tract infection and therefore was in bed, on a mainly fluid diet and was receiving antibiotics, when she developed the symptoms of acute diverticulitis. This management was continued, but with a change of antibiotic. However, after five days she still showed a leucocytosis of 12 700 per mm^3 and an erythrocyte sedimentation rate of 64 mm per hour. Within 48 hours of receiving oral betamethasone there was a marked reduction in malaise, pain and tenderness, with complete recovery in one week. The subsequent attacks of diverticulitis experienced by this patient have responded rapidly to tetracosactrin.

Case 2

In 1969 a 65-year-old woman with diverticulitis was treated in hospital with the full range of traditional therapy. She returned home while still taking antibiotics, with a pelvic mass the size of a 16-week pregnancy and complete anorexia and was unable to get out of bed unaided. She was given a single injection of tetracosactrin and 36 hours later she appeared practically fully recovered — the abdominal signs had disappeared, her appetite had returned and she was able to walk about freely and without pain. She had three further attacks of diverticulitis all of which

were cured within three days by the early administration of tetracosactrin. During a hysterectomy for carcinoma of the uterus in 1974, the only residual evidence of diverticulitis was a short, thickened segment in the sigmoid colon.

Case 3

A 35-year-old woman had had abdominal pain for three months, which had been diagnosed by barium enema and sigmoidoscopy as diverticulitis. She had been treated in hospital, but still had a leucocytosis of 15 000 per mm^3 and an erythrocyte sedimentation rate of 35 mm per hour. She was given tetracosactrin (1 mg) intramuscularly and 48 hours later was free of symptoms remaining so for three months, after which she had a relapse which was quickly cured in the same way. She had one further attack and when the present survey ended she had been free of symptoms for three years.

Discussion

Diverticular disease is considered to be chronic and incurable. Case 1 describes the trial of an unconventional approach, after a good many years of consideration, and with the back-up of a very capable surgical colleague should the trial miscarry.

Steroids are successfully used in other inflammatory diseases of the colon, and it may be that the fear of using them for diverticulitis is partly engendered by the traditional description of this disease (as an *aide mémoire* for students) as 'left-sided appendicitis',[3-5] although any similarity between the two conditions ends there.

It can be claimed that the use of corticosteroids in the group of patients studied is associated with fewer complications than had occurred when antibiotics were the main drugs prescribed and that the duration of symptoms is shorter with this new approach to treatment.

The apparent benefits of the treatment are possibly because the pain and pyrexia of diverticulitis are due to the retention of pus in the diverticulum by peridiverticular inflammation and corticosteroids reduce this inflammatory oedema and allow free drainage of pus in to the lumen of the bowel.

It is suggested that the results published here, although not statistically valid since an individual general practice cannot generate adequate numbers for a suitably balanced and monitored study, at least provide sufficient evidence to warrant a multi-centre double-blind comparison of the management of diverticulitis with and without corticotrophin treatment.

References

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Statistics of sexually transmitted diseases

A statistical bulletin giving detailed information about cases of sexually transmitted diseases seen at NHS clinics in England for 1983 and trends over the decade 1973 to 1983 has been published.

This DHSS bulletin, the first dealing specifically with sexually transmitted diseases, shows that 547 000 new cases were seen in NHS genitourinary medicine clinics in 1983, an increase over 1982. The number of new cases seen in 1983 was some 200 000 higher than the number seen in 1973. This represents an average annual increase of 5% over the period. Most of the increase was in non-specific genital infections and the more recently recognized diseases such as genital herpes. The classical venereal diseases such as syphilis and gonorrhoea were becoming less prevalent and accounted for only 9% of all cases in 1983 compared with 18% in 1973.

Some other features of interest in the bulletin are as follows: non-specific genital infection was the most common condition among male patients in 1983 and candidiasis the most common among female patients; there were nearly 10 times more male cases of primary and secondary syphilis than female cases; many patients seen in clinics did not have a sexually transmitted disease and visited clinics for check-up, simple counselling or advice. In 1983, cases not requiring treatment accounted for 22% of all cases seen.

Source: Department of Health and Social Security Statistical Bulletin no 3/85, price £1.00, can be obtained from the DHSS Information Division, Canons Park, Government Buildings, Honeypot Lane, Stanmore, Middlesex HA7 1AY.