

principles is too often delayed in the optimistic hope that medical therapy can achieve the unattainable.

W T COOKE

*Sandpits Farm,
Walsham-le-Willows,
Suffolk.*

References

- 1 Gazzard B. Long term prognosis of Crohn's disease with onset in childhood and adolescence. *Gut* 1984; **25**: 325-8.
- 2 Mayberry JF, Newcombe RG, Rhodes J. Mortality in Crohn's disease. *Q J Med* 1980; **49**: 63-8.
- 3 Prior P, Gyde S, Cooke WT, Waterhouse JAH, Allan RN. Mortality in Crohn's disease. *Gastroenterology* 1981; **80**: 307-12.
- 4 Weedon DD, Shorter RG, Ilstrup DM, Huizenga KA, Taylor WF. Crohn's disease and cancer. *N Engl J Med* 1973; **289**: 1099-103.
- 5 Heller G. Crohn's disease in Stockholm County 1955-1974. *Acta Chir Scand* 1979; suppl 490.
- 6 Prior P, Fielding JF, Waterhouse JA, Cooke WT. Mortality in Crohn's disease. *Lancet* 1970; **2**: 1135-7.
- 7 Cooke WT, Prior P, Mallas E, Allan RN. Crohn's disease, course treatment and long term prognosis. *Q J Med* 1980; **49**: 363-84.
- 8 Truelove SC, Pena AS. Course and prognosis of Crohn's disease. *Gut* 1976; **17**: 192-201.
- 9 Stahlgreen LH, Ferguson LK. The results of surgical treatment of chronic regional enteritis. *JAMA* 1961; **175**: 986-9.
- 10 Atwell JD, Duthie HL, Goligher JC. The outcome of Crohn's disease. *Br J Surg* 1965; **52**: 966-72.
- 11 De Dombal FT, Burton I, Goligher JC. The early and late results of surgical treatment for Crohn's disease. *Br J Surg* 1971; **58**: 805-16.
- 12 Lennard-Jones JE, Stalder GA. Prognosis after resection of chronic regional ileitis. *Gut* 1967; **8**: 332-6.
- 13 Kyle J. Prognosis after ileal resection for Crohn's disease. *Br J Surg* 1971; **58**: 735-7.
- 14 From H, Wilson FA, Rodger JB, Balint JA. Granulomatous bowel (Crohn's disease). *Arch Intern Med* 1971; **128**: 739-45.
- 15 Davis JM. The prognosis of Crohn's disease of the small intestine. *Postgrad Med J* 1961; **37**: 783-91.
- 16 Puntis J, McNeish AS, Allan RN. Long term prognosis of Crohn's disease with onset in childhood and adolescence. *Gut* 1984; **25**: 329-36.
- 17 Higgins CS, Allan RN. Crohn's disease of the distal ileum. *Gut* 1980; **21**: 933-40.
- 18 Greenstein AJ, Sachar DB, Pasternack BS, Janowitz HD. Reoperation and recurrence in Crohn's colitis and ileocolitis. *N Engl J Med* 1975; **293**: 685-90.
- 19 Alexander-Williams J. Surgery and the management of Crohn's disease. *Clin Gastroenterol* 1972; **1**: 469-92.
- 20 Cooke WT. Survey of results of treatment of Crohn's disease. *Clin Gastroenterol* 1972; **1**: 521-31.

Reply

SIR,—Thank you for giving me the opportunity to reply to the comments of Dr Cooke concerning the leading article on the prognosis of Crohn's disease in childhood and adolescence.¹ I admire the contribution Dr Cooke has made to our knowledge of Crohn's disease by his meticulous and long term follow up studies. It was precisely for this reason that I felt that the article written by his successors in Birmingham² was so valuable particularly as direct comparison was possible with a group of adult patients diagnosed and managed by the same team over a very prolonged period. Dr Cooke has concentrated his criticisms in three main areas; the retrospective nature of the Birmingham study, the mortality of childhood Crohn's disease, and the recurrence rate in this group.

The criticism made by Dr Cooke of any retrospective study, however carefully conducted, is clearly valid, but the medical career structure and financing of research make prospective longitudinal studies of chronic diseases difficult to perform.

The long term prognosis and mortality of children with Crohn's disease is controversial, but the results from Birmingham certainly suggest the outlook for the majority of such patients is good. The thrust of the leading article was to compare patients presenting in a paediatric age group with those first seen by adult gastroenterologists. A considerable body of work does suggest that age at diagnosis has an influence on the mortality although this is not accepted by all authors.³⁻⁴ Cooke himself has shown that the ratio of observed to expected mortality in the 5-29 year old age group (4.1) was similar to that in the 30-44 age group (3.7) although in older patients this ratio was not increased. Therefore young patients who form the majority of cases seen by gastroenterologists have a similar mortality to those seen by paediatricians. Perhaps the leader should have emphasised that the mortality of patients presenting with Crohn's disease in late or middle age may not differ from that of the general population. Data must exist in the Birmingham study to amplify this point. Three of the references cited by Cooke⁵⁻⁷ in favour of an increased mortality in patients referred to earlier studies from Birmingham recently updated by Puntis *et al.* Cooke has previously shown⁷ that whatever the age at diagnosis the relative risks of dying decreases as the follow up increases presumably because of a high mortality in the initial years after diagnosis. Thus it is perhaps not surprising that the most recent data² should be more encouraging than his previous studies.⁵⁻⁷ The studies from Cardiff⁸ and Mayo Clinic⁹ referred to by Dr Cooke were not included in the discussion of the prognosis of Crohn's disease in

children and adolescence. It is difficult to be certain of the completeness of case ascertainment in both these studies. In one⁸ 36 cases aged between 10 and 19 were collected using data from hospital diagnostic indexes over the years 1943–1963 and in the other⁹ records between 1919 and 1963 were analysed. It is likely that in the early years of both studies many children with minor symptoms of Crohn's disease were not included. The greatest advantage of the Birmingham study as already emphasised is that over a very long period the same group of workers were responsible for the diagnosis of both adults and children.

Some workers feel that the most important determinant of the prognosis in Crohn's disease rather than age is the anatomical site of involvement.¹⁰ Thus the conclusion of Puntis *et al*² that the outcome in ileocolonic Crohn's disease in children is similar to adults is important. The leading article makes it clear that this similarity does not extend to those with diffuse small bowel disease which is commoner in the paediatric age group.¹

The problem of disease recurrence was not directly alluded to in the leader. Dr Cooke in his letter highlights the problem of deciding whether recurrences are commoner in young patients by referencing four studies in which no such relationship was found although as he says no direct comparison with adults was made. Puntis and his colleagues² state that although recurrences may be commoner in children with Crohn's disease this may not have any effect on prognosis as such disease is usually limited to the site of previous surgery and was amenable to further local resection.

The adjective 'aggressive' used to describe the surgical approach to the treatment of Crohn's disease in Birmingham was not intended to be derogatory but merely to contrast the frequency of operation and the sparing use of steroids with that of a large American study.¹¹ Conservative surgery in this context simply referred to limited resection of only frankly diseased bowel. The leader emphasised that the Birmingham approach to management appears to produce equally good results with much less exposure to steroids. Cooke produces convincing evidence that the overall operation rate in Birmingham is no higher than in other major centres. The differences of emphasis may be that more liberal use of steroids merely delays surgery in a group of patients who will eventually require resection.

I am sure that Dr Cooke would agree with the main conclusion of the leader and of the recent study from Birmingham² that an optimistic approach should be adopted to the management of Crohn's disease presenting in childhood and the

spectrum of disease seen by paediatricians does not differ sharply from those seen by gastroenterologists dealing with adult patients.

BRIAN GAZZARD

*St Stephens Hospital,
Fulham Road,
Chelsea,
London.*

References

- 1 Gazzard BG. Long term prognosis of Crohn's disease with onset in childhood and adolescence. *Gut* 1984; **25**: 325–8.
- 2 Puntis J, McNeish AS, Allan RN. Long term prognosis of Crohn's disease with onset in childhood and adolescence. *Gut* 1984; **25**: 329–36.
- 3 Truelove SC, Pena AS. Course and prognosis of Crohn's disease *Gut* 1976; **17**: 192–20.
- 4 De Dombal FT, Burton IL, Clamp SE, Goligher JC. Short term course and prognosis of Crohn's disease. *Gut* 1974; **15**: 435–43.
- 5 Prior P, Gyde S, Cooke WT, Waterhouse JAH, Allan RN. Mortality of Crohn's disease. *Gastroenterology* 1981; **80**: 307–12.
- 6 Prior P, Fielding JF, Waterhouse JA, Cooke WT. Mortality in Crohn's disease. *Lancet* 1970; **2**: 1135–7.
- 7 Cooke WT, Mallas E, Prior P, Allan RN. Crohn's disease, course treatment and long term prognosis. *Q J Med* 1980; **195**: 363–84.
- 8 Mayberry JF, Newcombe RG, Rhodes J. Mortality in Crohn's disease. *Q J Med* 1980; **49**: 63–8.
- 9 Weedon DD, Shorter RG, Ilstrup DM, Huizenga KA, Taylor WF. Crohn's disease and cancer. *N Engl J Med* 1973; **289**: 1099–103.
- 10 Farmer RG, Michener WN. Prognosis of Crohn's disease with onset in childhood and adolescence. *Dig Dis Sci* 1979; **24**: 752–7.
- 11 Gryboski JD, Spiro HM. Prognosis in children with Crohn's disease. *Gastroenterology* 1978; **74**: 807–17.

Book reviews

Bile acids in gastroenterology Edited by L Barbara, R H Dowling, A F Hofmann and E Roda. (Pp. 230; illustrated; £21.95.) Lancaster, Boston, and The Hague: MTP Press Ltd, 1983.

This book originates from an international symposium on bile acids held every two years in Cortina, Italy. It is sponsored by an Italian Pharmaceutical Company (Gipharmex, Milan), who market bile acids for the medical dissolution of gall