since ischaemia or procaine block of peripheral nerves usually abolishes it.[3 4] Toxic reactions to penicillamine, especially haematological, renal, and gastrointestinal disturbances, occur in patients with rheumatoid arthritis. Neurological complications are relatively uncommon. Polymyositis and myasthenia gravis have been reported, but both were excluded in our patient. The decremental EMG response found only at higher stimulation rates, in the absence of single fibre EMG abnormalities, is unlike that found in myasthenia gravis or Eaton-Lambert syndrome.[5] To recognise neuromyotonia requires careful clinical and EMG examination since it is easily mistaken for myasthenia gravis.

We thank Dr C G Barnes for referring this patient.

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The London Hospital, London E1 1BB

JANE REEBACK, MB, MRCP, senior registrar in rheumatology
SARAH BENTON, MB, MRCP, registrar in neurology
MICHAEL SWASH, MD, FRCP, consultant neurologist

Atkinson Morley's Hospital, London SW20
MARTIN S SCHWARTZ, MD, consultant neurophysiologist

Age and prognosis in breast cancer

Contrary to previously stated opinion,[1] it has recently been suggested that breast cancer is more rapidly lethal with increasing age at presentation[2] and that this might be explained by an age-related difference in tumour biology or host response.[3] We did an actuarial analysis of the relationship between age at presentation with breast cancer and survival.

Patients, methods, and results

Up to 31 December 1977, 807 patients with primary breast cancer had presented to our unit. Of these, 214 (26·5%) were aged 21-49, 382 (47·3%) were aged 50-59, and 211 (26·2%) were aged 70-93. All were screened on presentation for metastatic disease, by methods we have previously described,[4] and staged according to the TNM classification. Survival data for the three age groups were determined by actuarial analysis. Thirty (3·7%) patients were excluded from the study because they died of causes other than breast cancer. A χ^2 test was used to establish whether there was any linear trend for the

Correlation of age at presentation with breast cancer and incidence of advanced local disease, incidence of metastatic disease, and estimated 10-year survival

Age at presentation (years)	Advanced local disease (%)	Metastatic disease (%)	Estimated 10-year survival (%)
21-49	34·1	7·5	53·0
50-69	48·7	13·6	42·5
70-93	59·7	16·6	33·9

incidence of advanced local disease or metastatic disease at presentation and to establish statistical significance between the estimated 10-year survival in the three age groups.

Patients had more advanced local disease with increasing age at presentation. The incidence of T3 and T4 tumours in the three age groups is shown in the table (P < 0·001). The incidence of metastatic disease at presentation also significantly increased with age (0·001 < P < 0·01). Actuarial analysis confirmed that the estimated 10-year survival was significantly reduced with increasing age at presentation (table). But when the analysis was repeated excluding patients with evidence of metastatic disease at presentation there was no statistical difference between the actuarial curves of the three age groups (P = 0·59).

Comment

With increasing age at presentation of breast cancer the patients had more advanced local disease, a higher incidence of metastatic disease, and a lower estimated 10-year survival. But when patients with metastatic disease at presentation were excluded there was no statistical difference in estimated survival between the three age groups. This evidence suggests that the deteriorating prognosis with increasing age was due to a more advanced stage of disease at presentation and not to age-related tumour or host factors.

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Combined Breast Clinic, St George's Hospital, Royal Marsden Hospital, and Institute of Cancer Research, London

W H REDDING, MB, BS, senior house officer
J MEIRION THOMAS, MRCP, FRCS, senior surgical registrar
T J POWLES, PHD, MRCP, senior lecturer in medicine and honorary consultant physician
H T FORD, FRCR, consultant radiotherapist
J-C GAZET, MS, FRCS, consultant surgeon and honorary senior lecturer

Diverticular disease of the colon in Africans

Diverticular disease of the colon has been thought to be almost unknown in Africans.[1] Personal knowledge of six cases,[2] however, suggested that the condition might not be so uncommon, and so a search for further cases was instituted.

Materials, methods, and results

The findings of 226 barium-enema examinations performed on adults at this hospital between January 1976 and February 1978 were reviewed. The table gives the results.

A total of 15 of the 226 patients had diverticular disease. This was the commonest single diagnosis made on barium-enema examination, as the "non-specific colitis" group almost certainly contained several different disease entities. The age range of patients with diverticular disease was 29-80 (mean 41) years and that of all patients in the series 18-80 (mean 40) years. Five patients with diverticular disease were aged 40 or under. This age incidence is lower than would be expected in a developed country.[3]

Results of 226 barium-enema examinations performed on adult Africans over two years

	No of patients		No of patients
Normal	155	Granuloma	6
Diverticular disease	15	Ulcerative colitis	4
Non-specific inflammatory disease	21	Other	5
Carcinoma	7	Unsatisfactory examinations	13

Comment

Diverticular disease of the colon was the commonest barium-enema diagnosis made at this hospital during the two years. Since the condition is considered to be rare in Africans[1] the finding suggests either an increasing incidence or lack of recognition in the past. The rarity of diverticular disease in Africans has been attributed to their high-fibre diet.[1 4] Dietary histories could not be obtained in this retrospective survey, but general observations and discussions with African colleagues suggest that the diet of even urban Kenyan Africans is still high in fibre by Western standards, although there has been an increasing use of sifted maize flour and refined sugar in recent years. If as Burkitt[4] suggests the greater part of a lifetime or about 40 years in a responsible environment is required to produce