Neisseria meningitidis or other forms of acute bacterial meningitis.1

"Pretreatment" of patients with bacterial meningitis is rendering in a significant number of cases blood and cerebrospinal fluid cultures (and in many also smears of CSF) negative for bacteria; these effects have been most notable in patients with N meningitidis meningitis.² Although in most patients with bacterial meningitis who have been "pretreated" the initial lumbar puncture on admission to the hospital still disclosed polymorphonuclear predominance, hypoglycorrhachia, and elevated levels of protein in CSF (which is most compatible with bacterial meningitis), occasionally pretreatment has resulted in CSF findings compatible with "aseptic" meningitis.3 Even by using counterimmunoelectrophoresis, the problem of differentiating aseptic from bacterial meningitis in patients with equivocal CSF findings and negative bacteriological studies has not been resolved. This is particularly relevant when commercial antisera have been used for counterimmunoelectrophoresis, since crossreactions and false positives have occurred, making the interpretation of results difficult at times.4 It should also be mentioned that the association of skin petechiae with meningitis is not pathognomonic of N meningitidis meningitis, since haemorrhagic skin manifestations have been observed in Acinetobacter (Mima polymorpha), Staphylococcus aureus, and other forms of bacterial meningitis5 6 and even in "aseptic" meningitis due to enteroviruses.7

Finally, the practice of "pretreatment" of patients with bacterial meningitis prior to hospitalisation has never been shown to reverse the progressive deterioration of untreated disease. We reviewed 1316 cases of community-acquired purulent meningitis admitted during the antibiotic era, and found that antibiotics had been given prior to admission to $54.6^{\circ}_{0.0}$ of patients.⁸ There were 103 fatalities, 70.8% of which occurred within the first 48 hours of hospitalisation. Among the 103 fatalities, 49.5°_{0} had been pretreated with antibiotics. Thus the practice of pretreatment with suboptimal doses of antibiotics prior to hospitalisation is to be condemned.

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- ¹ Underman AE, Overturf GD, Leedom JM. Disease-a-Month, 1978;24:7-63.
 ² Geiseler PJ, Nelson KE, Moses VK. Clinical Research, 1979;27:344A.
 ³ Converse GM, Gwaltney JM, Strassburg DA, Hendley JO. J Pediatrics 1973;83:220-5.
 ⁴ Finch CA, Wilkinson HW. J Clin Microb 1979;10: 519-24.
 ⁵ Murray HW, Tuazon CU, Sheagren JN. Arch Intern Med 1977;137:844-7.
 ⁶ Fred HL, Allen TD, Hessel HL, Holtzman CF. Arch Intern Med 1958;102:2204-6.
 ⁷ Lerner AM, Klein JO, Cherty JD. New Engl J Med 1965;269:678-85, 736-40.
 ⁸ Geiseler PJ, Nelson KE, Levin S, Reddi KT, Moses VK. Rev Inf Dis, in press.

*_*The "blind" administration of oral antibiotics to the febrile, sick child, which often continues for two to three days, in inadequate dosage, should not be confused with the injection of a single therapeutic dose of penicillin at the time the child is sent to hospital. While agreeing that the former may mask the diagnosis of pyogenic meningitis we do not believe that one dose of antibiotic will appreciably alter the cell count or biochemistry of the cerebrospinal fluid over a period of an hour or so. In some patients, however, meningococcal disease follows a relentless course and may be fatal despite apparently adequate chemotherapy. General practitioners do often administer a single dose of penicillin and this is found to be helpful. In one hospital that recently reviewed 113 consecutive patients admitted with meningococcal meningitis, only three died, a mortality of 2.6%. A haemorrhagic rash may indeed occur in meningitis caused by organisms other than the meningococcus. This, however, appears to be uncommon.-ED, BMJ.

"The Division in British Medicine"

SIR,-Dr S L Loudon (9 February, p 391) has written a thoughtful review of my book The Division in British Medicine, and I wish to respond to the criticisms he made.

Most of the faults he finds deal with the years before 1911 and after 1948, periods which I did not attempt to cover comprehensively. Indeed, at the moment I am working on a sequel which will examine the whole period from 1948 in greater detail. Some of his criticisms, moreover, are not clear and the most important reflects a basic misunderstanding. Dr Loudon suggests that I did not give sufficient attention to the influence of the referral principle-but he fails to see that the establishment of this principle was a symptom, not a cause, of the division in British medicine. Furthermore, though the principle was established in the nineteenth century, it did not become fully operational until the Health Service was created in 1948. Dr Loudon does not seem to be aware of the many difficulties encountered before it could be made to work. Until 1948 the GP did not always retain the patient but sometimes lost him in a competitive struggle with consultants and specialists.

With regard to the query raised about the relative influence of the various medicalpolitical groups, I thought my study made clear the central importance of the BMA in the development of health policy. In fact, it was the BMA-in conjunction with the TUCthat set forces in motion which led to the Beveridge Report. This is the most surprising point to emerge from my study and it is one that should be emphasised to a BMA audience. From my book it can be seen that, to a large extent, it was the doctors themselves who created the National Health Service and other aspects of the welfare state. This has great relevance to current problems because the BMA has recently come out in favour of an insurance-financed service. It would be ironic, indeed, if after spending so many years trying to abolish an insurance system the BMA managed to recreate one in the 1980s.

To understand how the alliance between the BMA and the TUC arose, one has to examine closely the development of the panel system and its intimate links with workmen's compensation. This is why my study focuses primarily on the panel doctor. Other aspects of general practice are discussed in less detail because they did not exert the same historical influence. The panel system, in all its essentials, is still with us today-whereas the wide-ranging group practice that flourished between the wars changed character after 1948. Moreover, the panel system occupied a much more important place in the provision of medical care than many have thought. Of the 20-odd thousand GPs in Britain in 1936, 19 000 were on the panel and, before the National Health Insurance Act ended in 1948 they treated half the population.

So far as my comments about social class are concerned, Dr Loudon attaches more significance to them than I intended. Social class differences within the profession were important in the nineteenth century-that is generally accepted-but the main influences in the twentieth century undoubtedly arose from State intervention and the advance of specialisation. My study is concerned primarily with the former but I did not neglect the effect of advancing specialisation (see pp 117, 155, and 163 in particular).

It is unfair to suggest, therefore, that I saw "the hardening of the division entirely as the result of a bitter conflict between the wars." The words "bitter conflict" are Loudon's, not mine. I do not think that the conflict was all that bitter because GPs did not put up much of a fight to enter the hospital world. Most were content to stay in their surgeries.

As for the blank cover on the dustjacket, it appears only on review copies. The completed cover was not ready at the time the book was sent for review.

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Preoccupation with hypertension

SIR,-My fellow Bristolian, Dr J A Moss (26 January, p 251), is worried about the number of "medicated neurotics" from over-diagnosis and over-treatment of hypertension.

A recent leading article (5 January, p 4) indicates that casual blood pressure readings may often be valid, and in any case "catching" the younger male with a borderline blood pressure gives one the opportunity to "grill" him about smoking, weight, and proper exercise, which one needs to be doing whether the patient has a true hypertension or not. Admittedly, one gets some puzzled reactions from the men who "only came in" for their sore throat or sprained wrist, but eventually they even produce a word of thanks for the aggressive approach. After a few months of possibly unnecessary treatment, the patient is delighted if the pills can be stopped, and he is then persuaded to attend twice a year, which I fondly believe gives him an added incentive towards good health behaviour.

The patients don't look the slightest bit neurotic about it, not in East Bristol anyway.

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Blood pressure and ambient temperature

SIR,-Your recent series on blood pressure measurement has emphasised the need for clinicians and epidemiologists to estimate the true biological value of blood pressure as accurately as possible, the former in the interests of the "borderline" patient, the latter to determine more precisely relative and attributable risks for the individual and the community. Ambient temperature has often been reported as affecting observer error. Recently we had the opportunity to confirm this finding in a review of data collected in a longitudinal, multiphasic screening study of the employed and general populations in west central Scotland.1