effects should "have the fullest possible confidence" in her method.

It may be that the confused image some women have of oral contraceptives is a reflection of the difficulties many doctors clearly have in deciding when the above symptoms are a sign of serious biochemical alterations. If this is the case, it may be even more difficult for health personnel who are not qualified medical practitioners to dispense these pharmacologically active compounds with the high standard of care that is expected in Britain.—I am, etc.,

ELLEN C. G. GRANT

New Malden,
Surrey

1 Herzberg, B. N., et al., *British Medical Journal*, 1971, 3, 495.

2 Office of Population Censuses and Surveys, *Family Planning Services in England and Wales*, London, H.M.S.O., 1973.

3 Royal College of General Practitioners, *Oral Contraceptives and Health*, London, Pitman Medical, 1974.

4 Beral, V., *Lancet*, 1974, 1, 1280.

5 Potts, D. M., and Swyer, G. I. M., *British Medical Bulletin*, 1970, 26, 26.

Status of Ward Sisters

SIR,—Mr. R. V. Clark (12 October, p. 105) in referring to the report of the Halsbury Committee on the pay and related conditions of service of nurses, expressed the view that the ward sisters "came out badly compared with other branches of the profession." In support of that view he says that "district nurses and health visitors are in Grade I and will receive a higher salary than ward sisters, who are placed in Grade II." This represents a misreading of the report.

Health visitors are indeed in the nursing sister/charge nurse I grade. This maintains their established lead over the ward sister (at present there is only one grade of ward sister) and takes account of the fact that health visitors, in addition to being State registered nurses and holding a midwifery qualification, are required to hold a further statutory qualification—the health visitor's certificate—which involves one year of study in an establishment of higher or further education. District nurses, other than those also holding health visitor and midwifery qualifications and undertaking combined work, are in nursing sister/charge nurse II grade—that is, the grade in which the traditional ward sister is also placed.

Thus the district nurse and the ward sister will be in the same salary grading. This represents an improvement in the salary of the district nurse for which the profession has been pressing to take account of the increasing intensity and complexity of domiciliary nursing. It also seems appropriate in the context of an integrated service that those who are responsible for the organization and provision of nursing care respectively in the hospital and in the community should share the same grading.

However, the Halsbury Committee recommends "the introduction of a higher level of ward sister, in line with the Briggs Committee's proposal." This ward sister would be in the nursing sister/charge nurse I grade—that is, the same grade as the health visitor; however, this new grade cannot be introduced until the nurses' and midwives' Whitley Council has agreed the criteria for entry to that grade. The Royal College of

Nursing attaches great importance to opening up the career structure for the clinical nurse by the establishment of this new grade and will use its influence to achieve early action on the determination of the necessary criteria.

Finally, I would like to say that the Royal College of Nursing warmly welcomes the emphasis which the Halsbury Committee has placed on improving the salary levels of nurses at clinical level—that is, those engaged in the practice of nursing in both the hospital and community services. This accords with one of the main points in its own evidence to the committee.—I am, etc.,

CATHERINE M. HALL

General Secretary,
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Deaths during Dentistry

SIR,—I recently attended the inquest on an apparently healthy young woman aged 20 years who died following treatment for a few holes in her teeth. In brief, she received about 140 mg of methohexitone, 10 mg of diazepam, and 0.6 mg of atropine while horizontal. She then became apnoeic and cyanosed and was being resuscitated by inflation of her lungs with air (which restored her colour to pink but pale) when the pulse that had been felt in the facial artery disappeared. External cardiac massage was applied and she was transferred to a local hospital, where an E.C.G. showed asystole. Normal heart beat returned only after bicarbonate therapy. She remained comatose with fixed dilated pupils and papilloedema and died approximately 10 hours later after two further episodes of cardiac arrest. At necropsy there was found evidence of multiple foci of myocarditis with many areas of cellular infiltration and muscle degeneration, though she had had no symptoms referable to her heart. The coroner's jury returned a verdict of death by misadventure.

There would seem to be two possible explanations of this death: simple severe anoxia or a lesser period of anoxia occurring in a patient with myocarditis—a condition in which the heart is particularly sensitive to lack of oxygen.¹ Either explanation begs the question as to the aetiology of the respiratory arrest and anoxia. This patient was being treated by an operator anaesthetist who was giving potent drugs in addition to performing the dentistry.

This case makes the fourth occurring at after treatment by an operator anaesthetist to have been reported in the first eight months of the year and this figure may be compared with an average of slightly less than one a year that occurred in the six-year period 1962-68. The published details of two of these four cases (2 February, p. 207; 10 August, p. 416) indicate that in one respiratory arrest occurred while the dentist was concentrating on making several attempts to remove difficult broken roots, while in the other the dentist was concentrating on packing the cavities with dental amalgam. The third case, about which complete details have proved difficult to obtain (10 August, p. 374), occurred during the taking of dental impressions in a young man of 28 years who had received 140 mg

of methohexitone and up to 10 mg of diazepam.² The coincidence of dosage of drugs with the above case is striking. There may well have been a fifth case involving a 10-year-old boy in Lancashire who died after nitrous oxide, oxygen, and halothane anaesthesia, though the published details (27 April, p. 224) do not make it clear whether the anaesthetist in this case was also the operator.

There has been at least one other dental anaesthetic death this year, though in this case there was a separate anaesthetist—a 13-year-old boy in the Croydon district who died of pulmonary oedema in the recovery phase of a brief nitrous oxide, oxygen, and halothane anaesthesia for the removal of two deciduous teeth (I would like to express my thanks to the coroner for letting me have the details). This death was very similar to that of a 9-year-old boy described in my review of 29 deaths.³

This excessive number of deaths occurring after treatment by operator anaesthetist would imply that prolonged dentistry distracts the operator from the continuous supervision that the anaesthetized patient needs. There can be little justification for the role of the operator anaesthetist in prolonged or difficult dentistry, though the anaesthetic hazard for the brief dental extraction lasting 10-30 seconds is probably not increased by this dual role. In view of the 1967 Ministry report³ and the coroner's comments in one case (2 February, p. 207), surely it is up to the profession to see if this practice could be curtailed. Perhaps the B.M.A. would advise the defence societies that they deprecate the use of defence subscriptions of B.M.A. members in meeting the medico-legal costs arising out of this practice. Alternatively the B.M.A. could advise the politicians that in the public interest the legal position relating to the operator anaesthetist in prolonged dental cases should be re-examined. A lead must be given or more young people will die and we, the profession, will be rightly accused of having done nothing. A sombre reflection is that if action had been taken a year ago it might, in the case referred to above, have saved this young woman's life. The defence societies may claim that they need to protect clinical freedom, but is the price of this kind of freedom becoming too high?—I am, etc.,

P. J. TOMLIN

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¹ Tomlin, P. J., *Anaesthesia*, 1974, 29, 551.

² Blatchley, D., *S.A.A.D. Digest*, 1974, 2, 168.

³ Ministry of Health, *Dental Anaesthesia*. London, H.M.S.O., 1967.

Lincomycin and Clindamycin Colitis

SIR,—Your leading article on lincomycin and clindamycin colitis (12 October, p. 65) calls for a reconsideration of the indications for using these two related antibiotics. The following observations may be helpful in making this reconsideration.

Four years ago we found that more than 70% of the staphylococci cultured from patients attending the accident and emergency department of this hospital were resistant to penicillin. After considering several alternative antibiotics we decided to

use oral clindamycin or, as a preoperative injection, intramuscular lincomycin as our antibiotic of choice.

The department treats approximately 75,000 new patients a year, of whom some 5,500 now receive lincomycin or clindamycin, making a total of 22,000 patients treated with these antibiotics during the past four years. Owing to the drug's rapid absorption and high tissue penetration the clinical results have been excellent and bacteriological monitoring shows that the staphylococci remain completely sensitive. The rapid resolution of acute soft-tissue infections has greatly reduced the number of patients' return visits, with consequent benefit to the cost and efficiency of running the department. Adverse reactions have been remarkably few. Three patients have had a transient generalized skin rash. A small percentage complain of dyspepsia and occasionally a patient who has had a few loose stools will remark, with an air of satisfaction, "that was good opening medicine, doctor." Only one patient has had incapacitating diarrhoea. He had about 15 motions a day for three days but then made a rapid recovery on symptomatic treatment from his own doctor.

An inquiry in the Leeds University department of surgery, where treatment is given for colitis patients from a very wide area, reveals that no patient has come under their care for colitis secondary to lincomycin or clindamycin therapy.

These observations suggest that lincomycin and clindamycin if used in isolation in the recommended dosage (600 mg of intramuscular lincomycin followed by 150 mg oral clindamycin 6-hourly for four days for the adult patient) are extremely effective and almost completely safe as the antibiotic of choice in the treatment of acute staphylococcal infections.—I am, etc.,

D. H. WILSON

Accident and Emergency Department,
General Infirmary,
Leeds

SIR,—We are impressed with the incidence of intestinal abnormalities in patients taking clindamycin. We see many patients with severe acne vulgaris since we are interested in the investigation of such patients. We have found clindamycin effective in patients with severe acne. However, 12% of 70 patients developed mild diarrhoea within two to three weeks of starting clindamycin; the diarrhoea, which was never troublesome stopped on withdrawing treatment. This figure of 12% contrasts with a complete absence of diarrhoea in 72 matched patients taking tetracycline. No patient had frank pseudomembranous colitis.

We prescribe clindamycin (150 mg twice daily for three to six months) only for severe acne and only after tetracycline and other treatments have failed. One reason for failure of tetracycline is poor absorption; tetracycline should be taken half an hour before food and not with milk. We warn the patients about diarrhoea and keep them under review.—We are, etc.,

W. J. CUNLIFFE
S. G. TAN

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Squint

SIR,—On reading the discussion that has followed your leading article (17 August, p. 430) we feel that there is one point in particular that should be clarified. This is the desirability for early surgery in acquired childhood squints if a functional result is to be hoped for. Of the last 200 patients with squints having surgery at this hospital, excluding congenital cases and those without the possibility of a functional result, the most frequent age at initial operation was 3 years.

If surgery is delayed until the age of 5 years the prognosis for a functional result is considerably reduced, and this was one of the points raised by Mr. G. V. Catford, Mr. K. C. Wybar and Mr. T. K. Lyle (5 October, p. 42) in their correspondence.—We are, etc.,

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M. D. P. CRICK

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** This correspondence is now closed.
—ED., *B.M.J.*

Role of Infection in Chronic Bronchitis

SIR,—I am amazed at the statement in your leading article, "Smoking and the Common Cold" (7 September, p. 594) that "there is now good evidence to conclude that the progress of airways obstruction associated with chronic bronchitis is unaffected by recurrent chest infections."

Those of us who have spent a lifetime looking after chronic bronchitics have witnessed a different scenario. Though the role of infection in the pathogenesis and natural history of chronic bronchitis is uncertain, there is little doubt that the respiratory viruses, *Mycoplasma pneumoniae*, and *Haemophilus influenzae* (1) cause acute exacerbations of chronic bronchitis; (2) increase purulent sputum and produce inflammation, ulceration, and eventually fibrosis of smaller airways, thereby increasing airways obstruction; (3) usher in cor pulmonale, particularly in the "blue bloater" type of chronic bronchitic, by increasing hypoxia which further elevates pulmonary hypertension; and (4) may even complicate intrinsic asthma with pulmonary eosinophilia and allergic alveolitis. There appears to exist a synergistic and reciprocal relationship between infection on the one hand and irritants and lung damage on the other. The latter predisposes to infection and infection aggravates bronchial damage and obstruction.

Then there is the evidence from the role of IgA, which may be decreased not only in chronic bronchitis but also in bronchial asthma. Even in cases of hereditary deficiency of α -antitrypsin infection may further contribute to parenchymal damage by release of elastolytic proteases from the increased number of phagocytes. Because the smaller airways, which are narrowed in chronic bronchitis, do not significantly contribute to airways resistance the measurement of FEV₁ and FVC may not disclose the aggravating effect of infection, but long-term studies may show that recurrent infections have insidiously brought on scarring and narrowing of terminal bronchioles.

The prompt and energetic treatment of every respiratory illness and the protection of the bronchitic from such irritants as smoking, atmospheric pollution, and fog are the fundamental basis in the management of chronic bronchitis and anything less is to be condemned.—I am, etc.,

PAUL CROSBY

Marple, Cheshire

** We can sympathize with the views expressed in this letter as clinical experience suggests a role for infection promoting airways obstruction and indeed this is seen during the acute phase of the illness. However, it is usual for this functional decline to be restored upon recovery from acute bronchitis. Studies have been summarized by Fletcher¹ and have shown that it is difficult to support the notion that bronchial infection is an important cause for the progressive airways obstruction seen in some patients with chronic bronchitis. There does not appear to be a relationship between purulence of sputum, frequency of chest illnesses, or antibiotic treatment and the rate of decline of FEV₁ that is observed in these patients. Thus there is no doubt that acute bronchitis can temporarily worsen airways obstruction but there is considerable evidence giving reason to doubt the idea that episodes of acute infection influence the progress of airways obstruction in these patients.—ED., *B.M.J.*

¹ Fletcher, C. M., *Journal of the Royal College of Physicians of London*, 1968, 2, 183.

Disability and Coal Workers' Pneumoconiosis

SIR,—I am grateful to Dr. J. S. McLintock and his colleagues for their response (3 August, p. 343) to my paper (22 June, p. 652). But I beg of them to abandon the use of "bronchitis," which indicates a disease, for the presence of cough and sputum, the commonest symptoms in respiratory disorders. In the same way Dr. J. W. Todd (17 August, p. 471) protests about conscious patients being said to be in diabetic coma.

Professor W. K. C. Morgan (3 August, p. 343) emphasizes the difference between pulmonary impairment and disability. I hope, however, he does not expect us to adopt his dictum that "pulmonary disability is an inability to work because of pulmonary impairment" (my italics). How right he is to say that impairment affects people in different ways! Yet he seems to be able to decide when impairment produces disability. People who think they can do this should write down the degree of impairment they expect to find in their patients (not those interested in compensation). Whichever tests they use they will find patients with relatively small impairment who will have disability as far as can be judged by careful clinical assessment and others with much worse readings who can do a fairly heavy job. Are we then to regard the former as malingerers or lacking in moral fibre? This may sometimes be true, but should we not also say that these tests do not reflect disability as closely as our scientific minds would like to believe?

I can assure Professor Morgan and Dr. R. M. McGowan and his colleagues (24 August, p. 521) that I do understand that