penicillin (a suspension of 300 mg of procaine penicillin and 60 mg of benzylpenicillin) to protect susceptible patients from bacterial endocarditis following dental treatment will have to change our practice, despite the support for this combination of antibiotics implicit in your leading article (26 July, p. 191), as this is no longer marketed by the sole U.K. distributors. We would suggest fortified benzathine penicillin B.P.C. (300 mg procaine penicillin, 190 mg benzylpenicillin, and 450 mg benzathine penicillin) by intramuscular injection as the most suitable replacement, to provide high initial (first hour) and also prolonged (one week) effective blood penicillin levels.—We are, etc.,

JOHN SEWELL
STANLEY KLAR

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SIR,—I agree with your leading article (26 July, p. 191) on this subject. For some time now, with the blessing of the British Cardiac Society, I have been trying to formulate a rational policy that might find general agreement. The final report has been delayed because of the importance of further experimental work that Durack and his colleagues are carrying out. My review and suggestions should be published in the *British Heart Journal* in some months' time.

While it is agreed that ideally penicillin and streptomycin should be given by injection for prophylaxis, in Britain this could be reliably achieved only in hospital. It is a fact that the majority of dentists are unwilling to give their patients intramuscular injections and they state that the patients would also be unwilling to receive them. Liaison with the general medical practitioners is too cumbersome to be thoroughly reliable. Therefore, if an oral regimen were effective, it would have great advantages. Further work in the experimental field¹ has demonstrated that a large loading dose of phenoxymethylpenicillin (penicillin V) provides bactericidal blood levels. Thus we are suggesting that, where injection cannot be given, for any dental work involving gum injury or endodontal procedures 2 g of phenoxymethylpenicillin should be given one hour beforehand, by mouth on an empty stomach, followed by 0.5 g six-hourly for three days. It is hoped that this regimen could be reliably followed and would be beneficial.

At this stage I do not propose to mention the other controversial aspects of this field of prophylaxis.

HUGH A. FLEMING

Addenbrookes Hospital,
Cambridge

¹ Pelletier, L. L., Durack, D. T., and Petersdorf, R. G., *Journal of Clinical Investigation*. In press.

Serum Immunoglobulins in Herpes Virus Infections

SIR,—I should like to add additional data to the letter of Dr. L. M. de Silva and others (19 April, p. 138) concerning serum immunoglobulins in herpes virus infection. I have been obtaining immunoglobulin levels in plasma donors three to four weeks after the onset of herpes zoster infection. The

Case No.	Age and Sex	Immunoglobulins (mg/100 ml)		
		IgG	IgA	IgM
1	59 M.	900	282	88
2	19 F.	1275	95	210
3	22 M.	1350	71	73
4	25 M.	1350	255	38
5	48 F.	1420	220	150
6	56 F.	650	95	70
7	32 M.	969	170	261
8	60 M.	1244	144	127
9	48 M.	1045	151	66
10	49 F.	1591	139	121
11	52 M.	1083	341	66
12	31 M.	969	324	89
13	18 M.	969	77	89
Mean after log transformation		1110	160	97
Mean after log transformation in 214 electrophoretically normal people		1140	210	102

immunoglobulin levels were measured using Hoechst Tripartigen plates. The mean after logarithmic transformation is shown in the table, as is the mean of the normal population similarly manipulated. Further data are obviously required, but this suggests that IgA levels are reduced.—I am, etc.,

P. R. BERRY

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What Should One Believe?

SIR,—During the commentary of a recent television programme on the control of infection it was stated that in this unit, where part of the programme was filmed, bacteriological swabs were taken from burns every four hours. No doubt the commentator had misheard what I or one of my colleagues might have said—namely, that we take swabs, when possible, every 24 hours. I should not have bothered you with this letter were it not for the fact that such technical misinformation is likely to be believed by some colleagues in related fields who happen to watch the programme; in this case the practice erroneously attributed to us was both impractical and unhelpful. Such errors could be avoided if the producers of programmes showed the scripts of commentaries before they are broadcast to the experts whose departments they have visited.—I am, etc.,

E. J. L. LOWBURY

M.R.C. Burns Unit,
Birmingham Accident Hospital

Services Available for Total Joint Replacement

SIR,—Dr. J. R. W. Morris (2 August, p. 290) predicts that in order to maintain the increase in tempo at which total joint replacements are being performed 40% of all elective orthopaedic beds would have to be made available for such cases in 1975. This may be an overestimate, however.

A key figure in his calculations is the 29% of all elective orthopaedic beds said to have been occupied, on average, by patients undergoing total hip replacements in 1972. This estimate is based on the figure of 23 000 discharges in that year "for arthroplasties of all sorts." The *Report on the Hospital Inpatient Enquiry for 1972*, however, shows that 20% of these arthro-

plasties did not relate to the hip-joint. Furthermore, prior to the 1975 Revision, the General Register Office's Classification of Surgical Operations did not permit the distinction to be drawn between total and partial joint replacements when these operations were coded for the purposes of the Hospital Inpatient Enquiry or for hospital activity analysis. "Arthroplasties of all sorts," therefore, included cases of fracture of the neck of femur admitted as emergencies and treated by femoral head replacement. In the Trent Region in 1973 only 62% of arthroplasties of the hip joint listed in the hospital activity analysis proved, on further inquiry, to have been total joint replacements and 33% were femoral head replacements. If the Trent figures are applied on a national scale, then only 62% of 80% of 23 000—that is, 11 408—discharges related to total hip joint replacement and these consumed 331 000 (17%) out of 1 999 000 bed-days for non-acute orthopaedics and not 29% as quoted by Dr. Morris. Predictions of bed needs based on the latter figure are therefore too high.

No doubt the increase in the rate of replacement of joints other than the hip will independently raise the number of beds needed to accommodate all the eligible cases. Since durations of stay are likely to be shorter when other joints are involved, however, it is improbable that anything like 40% of all elective orthopaedic beds will be required for these operations unless a deliberate policy is introduced to make inroads into the backlog of, say, knee-joint replacements by reducing the number of operations for more mundane orthopaedic conditions.—I am, etc.,

B. T. WILLIAMS

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** Dr. Williams sent a copy of this letter to Dr. Morris, whose reply is printed below.—ED., *B.M.J.*

SIR,—I thank Dr. Williams for his interest and courteous criticisms. He is correct in saying that the Hospital Inpatient Enquiry operations code 810 for 1972 includes partial joint replacements for the treatment of femoral neck fractures. Consequently the number of elective total joint replacements in 1972 was lower than is suggested in my article. However, on the basis of the Trent figures supplied by Dr. Williams and applied to the country as a whole the annual increase between 1972 and 1974 must be about twice as high as I suggested, or between 35% and 40%.

Like Dr. Williams, I do not believe that a 40% total joint replacement occupancy of elective orthopaedic beds is likely to occur in 1975, since the pressure of other orthopaedic problems and the wish of surgeons to keep balanced practices will prevent it. From now on we can describe the total joint replacement services as being saturated and the inevitable consequences of this saturation in relation to waiting lists are set out in my article. These consequences have become most apparent during the past year.

As Dr. Williams also points out, the introduction of reliable replacements for the knee, metacarpophalangeal, and proximal interphalangeal joints will exacerbate the prob-