Chemo-resistance of *Plasmodium falciparum* in central Africa

**Birtchn and Gresty suggest that the sharp low frequency peak may result from an increase in the output of a mechanism that contributes to physiological tremor. In an analysis of the tremor of 127 healthy subjects the averaged spectrum resembled that of a resonant system with broad-band forcing.** 2 There was no evidence of a specific input at a low frequency. However, as we noted in our report, a fea few apparently healthy subjects do have a substantial low-frequency peak in their tremor spectrum. We do not know whether this is a symptom of inchoate disease or a physiological (but in our experience rare) oscillation.

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**Intrapartum fetal monitoring**

Sirs.—Dr Westgate and colleagues' findings (July 25, p 194) suggest that fetal electrocardiographic waveform (FEGC) monitoring reduces the proportion of deliveries for fetal distress. We are doing similar research but so far our results differ from those of Westgate et al, monitoring in the FEGC group is based wholly on the CTG. Second, we found that interference with the ECG waveform. Conventional cardiotocography (CTG) is not included since it has not been shown to be useful in monitoring reduces the proportion of deliveries for fetal distress.

Perhaps the only real problem of chemo-resistance is with chloroquine, and the rate of chloroquine resistance has stabilised or may even be regressing. Inpatients given 25 mg/kg over three days, the rate of chloroquine resistance in Brazzaville, Congo, was 40% in 1985, 38% in 1986, and 34% in 1990, and in Yaoundé, 50% in 1987, 28% in 1988, and 30% in 1990. 6 The results of in-vitro testing were similar. In Yaoundé the Armitage test for trends showed a significant decrease in the rates of chemo-resistance from 1987 to 1991 (p = 0.04).

Chloroquine resistance stabilised in Brazzaville: 59% in 1985, 60% in 1987, and 59% in 1990 (Pearson's χ², not significant).

Amiodarone remains effective if the dosage is increased from 25 mg/kg to 35 mg/kg over three days. In 1990, the rate of in-vivo resistance was only 7% in Brazzaville and 4% in Yaoundé. Several years of data in Yaoundé have shown that quinine also remains effective:

**Impact of BCG on tuberculous meningitis in France in 1990**

Sirs.—BCG given in childhood has little or no impact on the overall transmission of the tubercle bacillus in a population, 2 as measured by the annual risk of infection (ARI)—i.e., the proportion of people infected or reinfected each year by the bacillus. BCG's direct protective effect in children constitutes, however, the main benefit of a vaccination programme. The reduction in incidence of tuberculosis greatersince 1990, hospital is an indirect benefit of the prevention vaccination programme.

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**References**


3. Britton and Gresty suggest that the sharp low frequency peak may result from an increase in the output of a mechanism that contributes to physiological tremor. In an analysis of the tremor of 127 healthy subjects the averaged spectrum resembled that of a resonant system with broad-band forcing. 2 There was no evidence of a specific input at a low frequency. However, as we noted in our report, a fea few apparently healthy subjects do have a substantial low-frequency peak in their tremor spectrum. We do not know whether this is a symptom of inchoate disease or a physiological (but in our experience rare) oscillation.

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