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REFERENCE

1. Walike J.W. (1979) Suturing techniques in facial and soft tissue injuries. *Otolaryngology Clinics of North America* 12, 415–430.

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Death from malaria

I wish to report a recent death from malaria which illustrates some of the problems regarding prophylaxis and treatment of this condition.

A 34-year-old female, previously in good general health, was brought to the accident and emergency (A&E) department at East Birmingham Hospital one morning having been discovered unconscious at home in bed. Cardiopulmonary resuscitation was commenced by the ambulance personnel. On arrival in the A&E department she was noted to be in asystolic cardiac arrest. As she still felt warm cardiopulmonary resuscitation was continued as per the Resuscitation Council Guidelines. There was no response whatsoever to resuscitation.

During the course of resuscitation blood taken from both peripheral and central veins was tested for glucose using BM stix and no glucose was detectable. Large quantities of 50% dextrose were given during the resuscitation, again to no effect.

Post mortem showed congestive splenomegaly and cerebral congestion. Post mortem blood smears showed a heavy parasitaemia with plasmodium falciparum.

Further questioning of her boyfriend revealed that she had recently been on a 2-week holiday in Kenya having returned 13 days prior to her death. Prior to and during the holiday she was on combined prophylaxis with chloroquine and paludrine. As she

developed unspecified side effects during the second week she reduced the daily dosage of her medication. Two days prior to her death she developed flu-like symptoms of fever, headache and body ache for which she took paracetamol. A day before her death she noted back pains, diarrhoea and haematuria. No medical attention was sought for these symptoms.

The incidence of malaria in the United Kingdom has been steadily increasing over the past 15 years, largely as a result of increased foreign travel. In 1991, 2332 cases of malaria were notified in this country and there were 12 deaths. Of these 11 were due to falciparum malaria and one was due to ovale malaria with spontaneous splenic rupture. Failure to take prophylaxis appears to have been a major factor in many of these deaths (7) (Malaria Reference Laboratory, personal communication). It is not widely recognized that malaria can occur even after taking adequate anti-malarial prophylaxis and that this may even be fatal. This is due to increasing emergence of drug resistant strains of the parasite especially in East Africa. Both patients and doctors may be unaware that relatively minor flu-like symptoms may precede a fatal illness. A failure to recognize the implications of taking a travel history may lead to the possibility of malaria being over-looked. Plasmodium falciparum malaria should be considered in any person who develops systemic symptoms including fever even 2 months after having returned from an endemic area. Parasitaemia may be intermittent hence a single negative blood smear does not exclude the diagnosis and indeed it may be prudent to treat the patient with quinine if the suspicion of malaria is sufficiently high.

Vivax malaria which is much more common can occur up to a year after return from an endemic area but failure to diagnose it is not as serious because it is not usually fatal.

Finally hypoglycaemia is a sign often seen in severe falciparum malaria and blood glucose testing should be part of the assessment of patients in whom this diagnosis is suspected.

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