The findings in this patient are similar in some ways to those in Glanzmann's syndrome, von Willebrand's disease, and to the platelet dysfunction seen in uremia and dysproteinemias such as myelomatisis and macroglobulinaemia. The failure of platelet aggregation by collagen and adrenaline is similar to that found in Glanzmann's syndrome, but the normal clot retraction and normal platelet aggregation by high concentrations of adenosine diphosphate would exclude that condition. It is similar to von Willebrand's disease in the long bleeding time and the reduced in-vitro platelet adhesiveness by Salzman's method but differs from that disease in the normal concentration of factor VIII and the impairment of platelet aggregation by collagen and adrenaline. The patient was neither uremic nor dysproteinemic. This case bears certain similarities to the cases described previously by others. It also emphasizes the fact that the platelet defect resembles that induced by ingestion of aspirin, and it is therefore important to make sure that in patients in whom such abnormalities are found have not been taking aspirin or other anti-inflammatory drugs.

Other than easy bruising and occasionally prolonged bleeding from superficial cuts, Sahud and Aggeler's patient had no other evidence of a bleeding tendency. She had survived to middle age with remarkably little disability, having undergone tonsillectomy, appendectomy, and extraction of molar teeth; her menstrual periods had been normal and she had had three uneventful pregnancies. The authors postulate that perhaps the small stab wound used to determine the bleeding time exposes an insufficient amount of subendothelial collagen to induce platelet aggregation readily, whereas in major operations the ratio of exposed collagen to platelets may be large enough to overcome this particular kind of platelet dysfunction.

More Blackwater Fever

Blackwater fever is reappearing in areas where it had become rare. This news has important implications both for indigenous inhabitants of malarial regions and for the many short-term visitors going there by modern jet travel. D. C. Dukes and colleagues have reported that it is now seen again in Central Africa after being uncommon there for many years. In Rhodesia, where it is notifiable, not a single case was recorded from 1955 until 1964, but Dukes and his colleagues encountered six between 1965 and 1967. Whereas formerly it was seen only in Caucasians, it is now encountered mostly in Africans.

In their cases deficiency of glucose-6-phosphate dehydrogenase was excluded as a cause of the haemolysis, and a special feature was renal failure with oliguria. This was successfully treated in five of the six patients by haemodialysis; in one recovery followed 33 days of oliguria and in another 21 days. This method of treatment, introduced by R. C. Jackson and A. W. Woodruff, is becoming increasingly recognized as an important advance in the management of such patients and has saved many lives.

Other lessons to be learned from this study include the need to be aware that severe falciparum malaria with renal failure can attack the inhabitants of malarial areas where control has been established. Paradoxical though this situation may seem, it arises because only among persons with a low level of immunity to malaria do blackwater fever and severe Plasmodium falciparum infections occur. After malaria is brought under control in a place the level of acquired immunity falls among people living there, and while the general incidence of malaria drops its severity increases among those who do acquire it. Further, in some countries, such as Ceylon, malaria control has within the past two years partially broken down, and millions not exposed to it for a decade are now becoming infected.

Blackwater fever is rare, possibly non-existent, among persons who take an adequate prophylactic dose of one of the synthetic antimalarials, such as chloroquine, proguanil, or pyrimethamine. Among visitors to malarial regions to take such a prophylactic is the most important means of preventing it. There is evidence that quinine is more likely to precipitate it than are the synthetic antimalarials. In the treatment of patients with malaria attention to hydration is important, for dehydration may favour the development of renal failure. Once blackwater fever has developed, correction of imbalance of fluids and electrolytes and provision of haemodialysis when uraemia is present are paramount. Transfer of the patient to a centre where these are possible is therefore an urgent matter. The patients withstand travel well, and without movement to a centre where these facilities are available the prognosis is grave. For those with cerebral symptoms prompt administration of large doses of dexamethasone—for example, 10 mg. intravenously—may be followed by dramatic improvement.

The incidence of malaria in Britain at the present time is showing a tendency to increase, and among severely affected patients oliguria and cerebral manifestations are not uncommon. The need to be on the look-out for such cases is apparent. Indeed, awareness of the possibility of malaria is the key to preventing severe attacks, as treatment in the early stages is simple. Malaria would cause few problems if doctors invariably asked patients whether they had recently travelled abroad and, on the answer “Yes,” immediately thought of tropical disease.

Training to Survive

The sad loss of Donald Crowhurst somewhere in the Atlantic is a reminder that adversity can impose mental stresses as severe as any physical blows that a hostile environment can offer. But, though they vary in their capacity to meet them successfully, men can be trained to do so with great benefit. And in the possession of a natural aptitude for survival even in extreme conditions women may on the average surpass men.

The balance between physical and mental endurance has often been observed among the survivors on a raft or in a lifeboat after a disaster at sea. Men alone or in groups cast away at sea face increasing hazards which take toll of their physical and emotional stamina. They may be injured at the outset; they may suffer thirst, hunger, seasickness, exposure, cold, or the blistering heat of the tropical sun. They may be overcrowded, continually battered and

1 Dukes, D. C., Sealey, B. J., and Forbes, J. I., American Journal of Medicine, 1968, 45, 899.
2 Jackson, R. C., and Woodruff, A. W., British Medical Journal, 1962, 1, 1367.