or compound fractures, to the Queen Alexandra; patients whose chances of survival might well have been prejudiced had it been necessary to take them all the way to Woolwich.

Now that the Defence Ministry has been functioning smoothly for some years, would it not be worthwhile to extend the Queen Alexandra on its existing site to serve as the main hospital for the Navy and Air Force as well as for the Army, as at present? The amalgamation and still closer integration of all three Medical Services would surely be the logical consequence of the Defence Ministry, and in the interests of patients and staff alike?

I am an ardent admirer of the Tate Gallery, and a frequent visitor to its exhibitions. I welcome the extension of accommodation so that many of the fine pictures in the vaults can be enjoyed by the general public. Great Britain possesses some of the world's most eminent architects, one of whom could surely devise a plan expanding the accommodation of the Gallery, vertically if need be, by utilizing the northern and eastern portions of the present site, parts of which would seem to be covered with nondescript "temporary" structures.

May I appeal to my colleagues, Sir, through the medium of the *B.M.J.*, to lend their support for the retention of the Millbank hospital?—I am, etc.,

SELWYN SELWYN-CLARKE

London N.W.6

### Bullous Lesions in Poisoning

SIR,—May I contribute to the recent correspondence on "Bullous Lesions in Poisoning" (7 August, p. 371) some points on the management of these lesions?

A 33-year-old female was referred to our plastic surgery unit on 23 June, having been comatose from an overdose of Sonalgin tablets (butobarbitone; phenacetin; and codeine phosphate) a week before (blood barbiturate on admission was 2·1 mg/100 ml). On examination she had patches of skin necrosis at the point of the right elbow, on the medial surface of the right lower thigh, over the right internal malleolus, on the medial surface of the left leg just below the knee, and on the dorsum of the left foot above the instep. These areas, which were initially blistered, had developed the appearance of full thickness burn eschar surrounded by erythema. There was also much induration surrounding the lesions below the left knee and on the right thigh, which was grossly swollen, but induration and swelling were absent from the other lesions.

Necrotic tissue was excised at operations on 29 June and 6 July. At the right elbow and ankle and the left foot necrosis was confined to the skin, but in the right thigh and left leg below the knee necrosis was found to have involved a wider area of subcutaneous fat and muscle. The extent of muscle necrosis was greater in the right thigh, such that most of the vastus medialis and some of th eadjacent rectus femoris muscles had to be excised. Healing was obtained by suture of the thigh wound and grafting of the others.

The finding of induration and excessive swelling in the two sites where necrosis had extended into muscle conforms with previous descriptions of muscle necrosis in similar cases.[1 2] The fact that these signs were absent from the other sites where necrosis was confined to skin suggests that they may be of diagnostic value in determining the depth of soft tissue necrosis.

The extensive necrosis of fat and muscle in the right thigh lay beneath a small patch of skin necrosis—a typical finding in electric burn injuries. I suggest that, as with electrical burns, treatment should be early excision of necrotic tissue with exploration of the muscular compartment if there is surrounding induration and excessive swelling. Failure to excise necrotic muscle may result either in early death from myoglobinuria[1 2] or in late contractures that follow healing by fibrosis.[3]

I thank Mr. R. D. P. Craig for permission to report on his patient.

—I am, etc.,

D. L HARRIS

Department of Plastic Surgery,
University Hospital of South Manchester,
Withington Hospital,
Manchester 20

1 Fahlgren, H., Hed, R., and Lundmark, C., *Acta Medica Scandinavica*, 1957, **158**, 405.
2 Mautner, L. S., *Archives of Pathology*, 1955, **60**, 136.
3 Howse, A. J. G., and Seddon, H., *British Medical Journal*, 1966, **1**, 192.

### Red Cell Size and Air Composition

SIR,—During routine haematological surveillance of personnel who spend intermittent prolonged periods in a controlled revitalized atmosphere, which among other contaminants contains around 20 p.p.m. of carbon monoxide, we have noted an apparent small but consistent increase in the mean corpuscular volume (M.C.V.) of red cells, as determined by the Coulter M.C.V. Computer, linked to a Model B Coulter cell counter. expected, the highest results are usually obtained from smokers, individual values in excess of 100 $\mu^3$ being fairly common. Since even nonsmokers in the intermittently confined group have higher carboxyhaemoglobin levels than normal, further studies are in progress to correlate carboxyhaemoglobin levels with M.C.V. Meanwhile it would be of value to know if other workers using electronic cell counters and sizing methods have reported similar changes in groups of smokers.—We are, etc.,

| | No. of Men | | Mean M.C.V. ($\mu$3) | S.D. |
|---|---|---|---|---|
| Intermittently Exposed Group | 522 | Before Exposure on this Occasion | 90·6 | 5·6 |
| | | After Exposure | 92·8 | 5·7 |
| Control Group | 78 | | 86·0 | 7·0 |
| Published Value [1] | | | 87·0 | 7·0 |

The Table indicates the effect of a single period of confinement on these personnel, and compares these results with those of a similar group of men who had never been confined, together with some published normal values.[1]

Similar results but with a greater individual variance are obtained by determining the M.C.V. from the results of red cell counts and microhaematocrit readings, for which some published results are given as $87 \pm 5{\cdot}0\mu^3$ [2] and $78—94\mu^3$.[3]

It is also apparent in this work that, as

R. J. W. LAMBERT
J. E. W. MORRIS

Institute of Naval Medicine,
Alverstoke,
Gosport, Hants

1 Coulter Diagnostics Inc., 1969.
2 Wintrobe, M. M., *Clinical Haematology*, 6th edn., London, Kimpton. 1967.
3 Whitby, L. E. H., and Britton, C. J. C., *Disorders of the Blood*, 10th edn., London. Churchill. 1969.

### Intermittent Claudication

SIR,—Mr. S. J. A. Powis and his colleagues (29 August, p. 522) give valuable information on the amount of improvement to be expected after division of the tendo Achillis in cases of intermittent claudication.

I do not want to go into the question of spontaneous improvement more than six months after the onset, but I would like to draw attention to simpler means of cutting out the action of the gastrocnemius muscle. This can be achieved by immobilizing the ankle joint during walking, which is easily done by a below-knee double iron set in a flat socket in the heel of the shoe. A rocker sole makes walking with a stiff ankle easier. Most present day shoes will require also a steel plate inserted into the sole to prevent it from breaking. The gait is, of course, different from that with a mobile ankle, but this hardly ever needs special training.

The effect is immediate, doubling or trebling the "claudicating distance." A great merit of this method is its reversibility.—I am, etc.,

H. G. S. KORVIN

Shaftesbury,
Dorset

### Reiter's Syndrome—Protean Symptomatology?

SIR,—It has been well argued in the past that ankylosing spondylitis and Reiter's syndrome are identical diseases.[1] In one series of 54 patients with classical ankylosing spondylitis 45 had definite evidence of prostatitis.[2] Ankylosing spondylitis has also been found in 2—5% of cases of ulcerative colitis and other inflammatory diseases of the intestine.[3] Reiter's original description was of a typical post-dysenteric case[4] and, after an outbreak of Flexner dysentery in Finland, 344 cases of Reiter's syndrome were described.[5]

Keratoderma blenorrhagica occurs in about 10% of patients with Reiter's syndrome, and keratoderma is considered by many to be a form of psoriasis:[6] ankylosing spondylitis has been reported in up to 33% of patients with psoriasis.[7]

Non-gonococcal urethritis is not a single