CORRESPONDENCE

Correspondents are urged to write briefly so that readers may be offered as wide a selection of letters as possible. So many are now being received that the omission of some is inevitable. Letters should be signed personally by all their authors.

Risks and Uses of Total Hip Replacement

SIR,—In what is otherwise a well-balanced review of the subject you have failed to do justice to the virtues of the metal-to-metal articulation. These implants, particularly that designed by McKee, were the earliest to be released widely for general use and it is not surprising that some of the long-term problems have first become evident in this type of articulation. Stress fractures of the acetabulum, for instance, were initially noted in metal-to-metal joints, but it is now clear that these also occur in those in which the acetabulum is made of polyethylene.

The relationship between skin hypersensitivity and loosening of an implant is still far from certain. Skin hypersensitivity to one of the metallic components of cobalt chrome occurs in 4% of patients, but in the vast majority of these a metal-to-metal articulation will function perfectly well and the risk of loosening in these patients is in our experience only marginally increased. A positive skin reaction is not in itself a contraindication to a cobalt chrome articulation.

The surface finish and the sphericity of all implants have improved a great deal during the past four years, and while the frictional resistance of the metal-to-metal implant is still higher than that of the metal-to-plastic, this difference is no longer great and may be of little clinical significance. Certainly a plastic acetabulum wears well but so does a metal one, and the end results of this type of surgery are likely to vary more with the way in which the implant is used and the environment in which the operation is performed than with the nature of the device which is used.

The fate of the wear products, whether they be plastic or metal, must be one of our greatest concerns, particularly in young patients. It is important that disciplines other than orthopaedic surgery should be aware of the possibility that these particles might, many years later, be responsible for a systemic disturbance or for a local one at some distance from the site of the total joint replacement. The need for a register of patients subjected to total joint replacement and a study of their morbidity and mortality over the years is evident if we are to determine, within a reasonable period of time, that these implants are relatively free from long-term hazards.—I am, etc.,

P. A. RING

Reigate, Surrey

Solitary Pulmonary Nodules

SIR,—As your leading article (26 April, p. 157) says, the management of the solitary pulmonary lesion is a perennial problem, but to say that the techniques now available for the elucidation of this problem "may provide a positive diagnosis of tumour" in only "a small proportion of cases" cannot be allowed to pass unchallenged.

The Japanese[1] have reported accurate diagnosis in small peripheral lesions in as many as 80% of cases using a fibreoptic bronchoscope under radiological control. A similar high proportion of success was recently reported to the Thoracic Society by McMillan, who used a brush biopsy technique.

There is another method of diagnosis which your article does not mention—namely, aspiration biopsy. This technique has been used at the London Chest and Brompton hospitals for some time with considerable success. Histological and bacteriological diagnoses were made in 166 out of 227 cases (73%) with no false positives and no important complications, and the method has proved superior to that of sputum cytology.[2]

It is therefore now seldom necessary for a surgeon to be presented with a pulmonary "coin" lesion without a histological diagnosis. Aspiration biopsy has gone a long way to achieving this.—We are, etc.,

J. R. BELCHER
MAXWELL CAPLIN

London Chest Hospital, London E.2

1 Ikeda, S., Yanai, N., and Ishikawa, S., *Keio Journal of Medicine*, 1968, **17**, 1.
2 Dick, R., *et al.*, *British Journal of Diseases of the Chest*, 1974, **68**, 86.

Prophylaxis of Postoperative Deep Vein Thrombosis

SIR,—Knowing what was afoot, I was waiting with interest the publication by Mr. I. L. Rosenberg and his colleagues of the report of their clinical trial (22 March, p. 649).

I accept their main conclusion that low-dose heparin can reduce the risk of post-operative deep vein thrombosis (D.V.T.) and pulmonary embolism, but not that this method is greatly superior to electrical stimulation of the calf. Their results do not justify this opinion.

They underestimate the value of electrical stimulation because of defects in the conduct of their trial. Table I shows that the control group amounted to 44·3% of the total 273 patients. This makes me suspect that the method used to decide which patient was entered into which group did not produce effective randomization.

Secondly, as it is already known that both heparin and stimulation reduce the risk of postoperative D.V.T., a direct comparison ought to have been made between the two rival prophylactic methods. Taking the