

No. of Patients, Anaesthetic, and Operation	Fall in B.P.	Time of Lowest B.P.*	Change in Pulse Rate	Rise in B.P.	Time of Rise*	Change in Pulse Rate
37 patients on halothane						
Femur .. .. .	10 $\pm$ 10	92 $\pm$ 75	-3	13 $\pm$ 13	370 $\pm$ 189	+2
Socket .. .. .	7 $\pm$ 5	127 $\pm$ 161	-2	9 $\pm$ 10	413 $\pm$ 204	+1
13 patients with neuro-leptanaesthesia and controlled ventilation						
Femur .. .. .	13 $\pm$ 11.0	86 $\pm$ 126	0	22 $\pm$ 9.1	307 $\pm$ 125	+7
Socket .. .. .	12 $\pm$ 8.9	33 $\pm$ 36	-2	23 $\pm$ 18	445 $\pm$ 164	+2
8 patients with subcapital fracture of femur ..	11.0 $\pm$ 5.4	28.0 $\pm$ 15.2	-8	15 $\pm$ 26	159 $\pm$ 125	-4

\*Times of lowest and highest B.P. given in seconds from the start of insertion of cement.

finding, however, was the fact that in six out of eight cases halothane had to be withdrawn from the anaesthetic before the surgical procedure began because of its effect on the blood pressure. Any potentially hypotensive anaesthetic agent must be used cautiously in these elderly patients, as the implantation of acrylic may then be an added risk.—We are, etc.,

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- 1 Phillips, H., Cole, P. V., and Lettin, A. W. F., *British Medical Journal*, 1971, 3, 460.
- 2 Peebles, D. J., Ellis, R. H., Stride, S. D. K., and Simpson, B. R. J., *British Medical Journal*, 1972, 1, 349.
- 3 Ellis, R. H., and Mulvein, J., *British Medical Journal*, 1972, 2, 528.
- 4 Phillips, H., and Dandy, D., *British Medical Journal*, 1972, 2, 713.

### Methylmethacrylic Cement and Fat Embolism

SIR,—Professor J. Hume Adams and others (23 September, p. 740) report fat embolism and cerebral infarction after the use of methylmethacrylic cement in Shiers's arthroplasty of the knee. This is the third recent report of fat embolism from cement.<sup>1,2</sup> This underlines the importance of the complication. Gresham and his colleagues<sup>1</sup> even suggest that until acceptable prophylactic measures can be devised internal fixation may be preferable in the treatment of acute fractures of the femoral neck.

The possible importance of reducing intramedullary pressure by venting the shaft of the femur has been recognized, but I have found no reference to the obvious precautionary measure of sucking out all the fat before insertion of the cement. I have adopted the practice of disconnecting the sucker from the tube and passing the tube right down the reamed out bony cavity before inserting the cement. I have found that a large quantity of fat can usually be aspirated. No cases of fat embolism or circulatory collapse have been observed in patients treated in this way.—I am, etc.,

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- 1 Gresham, G. A., Kuczyński, A., and Rosborough, D., *British Medical Journal*, 1971, 2, 617.
- 2 Sevti, S., *British Medical Journal*, 1972, 2, 257.

### Asthma and the Anxious Child

SIR,—The articles on school refusal by Dr. Lionel Hersov (8 July, p. 102), and the

anxious child by Dr. Anne Bolton (6 September), serve to emphasize the benefits of child psychiatry in a variety of situations. Nevertheless, I was struck by the omission of any reference to asthmatic children by both authors. Few would deny that there are many emotionally-disturbed asthmatic children. It is possible that psychotherapy is being neglected in the treatment of these patients?

Current modes of therapy for asthmatics aim at symptomatic relief from attacks and the removal of "intrinsic" or "extrinsic" pathogens. Little or no attention is paid to the underlying cause for the potential to exhibit asthma. I believe that psychological factors play a major role in the priming of an asthmatic subject and deserve far more attention than they receive. To be fair, it is indeed difficult to determine whether anxiety in an asthmatic is a cause or effect of the disease. However, by a slightly teleological approach to the problem perhaps an answer can be found.

Briefly, I should like to suggest that it is the coincidence of "intrinsic" and "extrinsic" factors in a child which results in asthma that may develop as a learned response to other forms of stress. Thus anxiety in an atopic subject leads to asthma which may then be precipitated by a host of other stimuli—physical, allergic, or psychological. If this is true, and asthmatic children develop symptoms originally as a means of resolving some emotional conflict, one must query why other children with similar disturbances do not develop asthma. It is my contention that the latter group show an inability to react to "extrinsic" stimuli—that is, they would exhibit asthma if they could. Thus one would expect to find a lower incidence of allergic disease in this group when compared with normal children. Atopy would represent an enhanced potential for the presentation of asthma. Are there any non-asthmatic anxious children who have raised serum IgE levels?

I am not in a position to answer these questions. Perhaps someone else can help. What is obvious though is that, cause or effect, anxiety is very much involved with asthma and should be treated on a par with bronchoconstriction. It is time the psychotherapist's "hot air" was given the same regard as the physician's "aerosol."—I am, etc.,

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### Large-bowel Cancer after Previous Surgery

SIR,—We have recently undertaken a large-scale investigation into the clinical history of some 600 patients with various large-bowel disorders, and though the detailed

findings of this survey are still unreported one rather puzzling and disquieting feature of our results perhaps merits comment at this stage.

The survey in question includes some 181 patients with large-bowel cancer, and in perusing the clinical history of these 181 patients we find that some 70 in all (38.7% of the total) had undergone previous abdominal surgery for a variety of other complaints. Some operations were minor ones, such as 14 appendicectomies. But some 40 patients (22.1%) had undergone major pelvic surgery and of the 87 female patients with large-bowel cancer no fewer than 23 (26.4%) had had previous major gynaecological operations. Without having conducted any detailed comparisons it seems to us inconceivable that these proportions are representative of findings in a matched sample of the general population. Moreover, when we compare age distributions in our cancer patients we find that in the group with previous operations carcinoma is twice as likely to develop before the age of 50 years.

We might perhaps have written off the findings as due to chance or have ascribed them to an unrepresentative sample of patients presenting to a specialized unit, but in this connexion it is interesting to read that Clark and Jones<sup>1</sup> noted (without comment) that a similar proportion (79 out of 228 cases (34.6%)) of large-bowel cancer patients in their New Zealand series had undergone previous abdominal operations. We would be interested to inquire whether any other groups of workers have noted comparable findings, and if other workers can see beyond our own immediate and perhaps facile inclination to suggest that lower abdominal surgery and subsequent development of large-bowel cancer are in some way interconnected.—We are, etc.,

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- 1 Clarke, A. M., and Jones, I. S. C., *New Zealand Medical Journal*, 1970, 71, 341.

### Screening for Malignant Hyperpyrexia

SIR,—The study by Dr. F. Richard Ellis and his colleagues (2 September, p. 559) on the screening of relatives of patients who have suffered from malignant hyperpyrexia is extremely important. It extends previous studies showing that a number of such relatives have raised serum creatine kinase activities.<sup>1,2</sup> They show that it is possible in a number of such relatives to detect sub-clinical abnormalities, both histological and functional, in the muscle. By inference those with these abnormalities or with a raised creatine kinase activity would be liable to develop malignant hyperpyrexia if exposed to general anaesthetic agents. They found at least one relative with a normal serum creatine kinase activity whose muscle was morphologically and functionally abnormal.

However, the matter is clearly more complicated than indicated by their results. We have undertaken an investigation of two families with members who have suffered from malignant hyperpyrexia and rigidity, using essentially identical methods to those described by Ellis and his colleagues. The results are set out in the accompanying