later note by McClure² stating, "... it has recently been learned that at autopsy the neoplasms evidenced in the bladder and in the breast were indistinguishable histologically. It is impossible, therefore, to conclude that there was a positive relationship between oestrogen therapy and the breast tumours. . ."

(2) The editorial also states that "the only cases of breast cancer in men with prostatic cancer have been in patients receiving oestrogen therapy." Gaspari in correspondence with Gardini³ mentioned three patients with carcinomas in the breast and prostate without oestrogen therapy. Guthorn,⁴ Hertz,⁵ and Treves and Holleb⁶ reported single cases of such associations.

If, as Liebegott⁷ suggested, tissues from the breasts and prostates of patients with carcinoma of the prostate were examined at necropsy, a better understanding of this relationship may be obtained.—I am, etc.,

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REFERENCES

- 1 McClure, J. A., and Higgins, C. C., *J. Amer. med. Ass.*, 1951, **146**, 7.
- 2 ——— *ibid.*, 1951, **146**, 1608.
- 3 Gardini, G. F., *Oncologia (Basel)*, 1948, **1**, 129.
- 4 Guthorn, P. J., *Milit. Surg.*, 1951, **109**, 110.
- 5 Hertz, R., *Cancer Res.*, 1951, **11**, 393.
- 6 Treves, N., and Holleb, A. I., *Cancer (Philad.)*, **8**, 1239.
- 7 Liebegott, G., *Beitr. path. Anat.*, 1952, **112**, 235.

Chicken-pox and Chromosome Aberrations

SIR,—We had the opportunity to examine recently the chromosomes from blood-cultures of a 2-year-old boy with bird-headed dwarfism. The mother had chicken-pox at the end of the sixth month of pregnancy. The baby at birth showed microcephaly with premature closure of the fontanelles and micrognathia. Growth has always been delayed, though the boy is of normal intelligence. The following tests gave normal results: blood count, urinary excretion of phenylpyruvic acid, Sabin test, Wassermann reaction, metopirone test, electroencephalogram, renal-function tests. Cytogenetic study (blood was taken before x-ray examinations were done) revealed a normal male karyotype 46/XY but a high number of chromosome breakage. Of 200 suitable cells, 145 had a normal morphology, 2 were polyploids, 53 had several aberrations (57 chromatid gaps, 35 isochromatid gaps, 12 chromatid breaks, 4 dicentric, 3 fragments, one fusion of chromatids of two chromosomes).

The problem of induction of chromosomal aberrations by virus in man has already been examined by several authors. After the first reports by Nichols *et al.*¹ on measles, Aula² in chicken-pox, and Harnden³ in yellow fever, Wiedemann⁴ found recently in a 6-year-old

boy with Gregg's syndrome chromosome breakage in mitoses from both blood and bone-marrow cultures. All these findings were discussed, but not necessarily confirmed by others.⁵⁻⁷

In our case we think probably that the attack of chicken-pox in the mother during the sixth month of pregnancy might have been responsible for both the premature closure of the fontanelles and sutures and for the micrognathia and the chromosome aberrations.—We are, etc.,

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REFERENCES

- 1 Nichols, W. W., Levan, A., Hall, B., and Ostergren, G., *Hereditas (Lund.)*, 1962, **48**, 367.
- 2 Aula, P., *Lancet*, 1964, **1**, 720.
- 3 Harnden, D. G., *Amer. J. hum. Genet.*, 1964, **16**, 204.
- 4 Wiedemann, H. R., *Lancet*, 1964, **1**, 721.
- 5 Tanzer, J., Stoitckov, Y., Harel, P., and Boiron, M., *ibid.*, 1963, **2**, 1070.
- 6 Selzer, G., *ibid.*, 1963, **2**, 336.
- 7 Baughman, F. A., jun., Hirsch, B., and Benda, C. E., *ibid.*, 1964, **2**, 101.

Respiratory Failure

SIR,—In his article (5 June, p. 1451) Dr. E. J. M. Campbell emphasizes a very important fact concerning the relationship between arterial PCO₂ and PO₂ in patients with respiratory failure who are breathing ordinary air (20.9% O₂): When PCO₂ is increased to 80–90 mm. Hg, PO₂ is usually decreased to 20–30 mm. Hg, 20 mm. Hg probably being the minimum tolerable arterial PO₂. I reported this fact in 1963 and am delighted to have my observations confirmed and their consequences stressed, but I would like to point out that the reference to my article concerning the above subject is not correct; it should be: Refsum, H. E. (1963). *Clin. Sci.*, **25**, 361.—I am, etc.,

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Abortion and the Psychiatrist

SIR,—Dr. M. Sim (19 June, p. 1612) castigates the opinions of others as "uncritical." Since his own opinion, that there are no psychiatric indications for termination of pregnancy, could have considerable influence, it may be worth reviewing the evidence for his three main conclusions.¹

(1) *Puerperal psychosis is virtually unpredictable.*—Actually his data suggest that certain features do have predictive value: these are, a history of mental illness in a near relative (found in 53.5%), a previous, non-puerperal, mental breakdown (11.3%), and a previous puerperal psychosis (27.6%). Unfortunately, comparable information about non-psychotic women was not obtained, but the last figure at least is clearly much higher than normal.

Indeed several studies^{2,3} have shown that the risk of a second attack is as high as one in five or six pregnancies. Since the incidence of puerperal psychoses is only one per 1,000 live births (Dr. Sim's figure), the occurrence of one attack indicates that the risk after later pregnancies is about 200 times greater than normal. Naturally certainty is unattainable. But does Dr. Sim adhere so firmly to his

FIG. 1

FIG. 2

FIG. 1.—Types of chromosome aberrations found in the patient (blood-culture): chromatid gaps (A, B), gap at the centromere (C), chromatid breaks (D, F, G), fragments (E), trivalent (H), fusion of the long arms of two chromosomes (I). FIG. 2.—Mitosis with several chromosome aberrations.

belief of unpredictability that he would not advise close psychiatric supervision of these women when they have further children? And surely it is in the period following childbirth, not in pregnancy, that the coroner's records might reveal an increased risk of suicide?

(2) *Puerperal psychosis carries a good prognosis.*—Here it is surprising to find that this crucial question is dealt with in a six-line paragraph (with references to a few selected cases elsewhere). It is not stated how long after the illness the follow-up took place, nor in how many cases, by what methods, or by whom the information was obtained. There is no indication as to how the mental state was assessed, nor on what criteria "permanent mental damage" would have been diagnosed. Nothing is said about the incidence of further puerperal attacks. It has to be concluded that Dr. Sim's follow-up falls short of the standards ordinarily demanded of clinical research.

Although the prognosis in puerperal psychosis has very greatly improved since the introduction of E.C.T., several recent studies²⁻⁶ refer to the occurrence of suicide, infanticide, or chronicity during or following a puerperal psychosis. It does not seem right that termination should be entirely dismissed as a possible prophylactic measure.

Hospital Junior Staff

SIR,—I would like to draw the attention of all hospital junior staff to an important recent publication of the Central Consultants and Specialists Committee (appearing in Bulletin 32), known as the "Richmond Document." This document includes the Committee's views on remuneration. If accepted by the Joint Consultants Committee they would form the profession's recommendations, upon which the 1966 Review Body is likely to add its overall percentage increase. It also contains a variety of recommendations on terms and conditions of service which the Committee feels are urgently in need of improvement. A large number of suggestions are made concerning hospital junior staff. Many of these have come from the Hospital Junior Staff Group following the Group Council's meeting in May, to which many of your readers kindly took the trouble to send their views. Though not all our recommendations received support, a considerable number did and are included.

Some of the recommendations in the document concern matters we have been trying to put right for years, whilst others concern new approaches. It will be seen, for example, that a ten-year progressive salary scale is recommended for hospital junior staff below the status of senior registrar. This idea has considerable advantages over the existing salary arrangements, which are determined entirely by grade. Yearly increments would be given whether or not promotion was obtained. But on appointment to registrar either a jump would be made to the point on the scale which is finally decided as the minimum for that grade, or if that had been reached or passed already the doctor concerned would move to his next incremental point at the appropriate time for him. In addition should a registrar or senior registrar subsequently move to a post of lower status—for example,

(3) *Abortion may in itself produce a psychosis.*—Dr. Sim does not provide or quote any data which would enable us to calculate the incidence of psychosis following therapeutic abortion. In Ekblad's series of 479 women whose pregnancies had been legally terminated, only 2% suffered "serious depression" immediately afterwards. An occasional post-operative reaction has, perhaps, to be anticipated; but Dr. Sim's statement that such psychoses "tended to be more malignant" (than puerperal psychoses) is not supported by any evidence.

In short, his case is not beyond dispute. This becomes even more apparent when it is remembered that the bulk of patients in whom termination has to be considered fall outside the scope of his study.—I am, etc.,

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REFERENCES

- ¹ Sim, M., *Brit. med. J.*, 1963, 2, 145.
- ² Protheroe, C., M.D. Thesis, University of Sheffield, 1965, to be published.
- ³ Martin, M. E., *Brit. med. J.*, 1958, 2, 773.
- ⁴ Vislie, H., *Acta psychiat. scand.*, 1956, Suppl. 111.
- ⁵ Ryle, A., *J. ment. Sci.*, 1961, 107, 279.
- ⁶ Seager, C. P., *ibid.*, 1960, 106, 214.
- ⁷ Ekblad, M., *Acta psychiat. scand.*, 1955, Suppl. 99.

for training reasons—he would not fall in salary but would continue to gain yearly increments from the point reached in the more senior position.

The document is being circulated widely, but it has not been found possible to send a copy to individual doctors personally. However, a number of copies should already have reached hospital secretaries, so that it can be seen by hospital junior staff.

I think it important that this matter should be brought to the notice of hospital junior staff for two reasons. Firstly, because the document itself is open to revision before it is finally accepted. Already we have made a number of suggestions to improve it and no doubt more will be made at the next Hospital Junior Staff Executive Committee on 16 July. Secondly, it seems especially necessary at this time to let the hospital junior staff see that some at least are trying hard to improve the position in the hospital field.

Finally I must emphasize that here is a real chance to resolve many of the difficulties affecting all of us working in hospitals. If any individual doctors have constructive criticism of this document we would be very pleased indeed to receive it.—I am, etc.,

EDMUND A. HARVEY-SMITH,
Chairman,
Hospital Junior Staff Group Council,
Kingston Hill,
Surrey.

City of Birmingham Vacancies

SIR,—I have been a member of the B.M.A. for 26 years. I protest in the strongest possible terms against the action of our journal in publishing the Birmingham Executive Council's advertisement of the vacancies in general practice in that city (26 June, p. xxv). This is a dreadful stab in

the back for the courageous doctors who are setting us all an example.—I am, etc.,

Larne, Co. Antrim.

W. B. JAMISON.

SIR,—I read the letters regarding executive council vacancies in Birmingham and your comment (3 July, p. 49). The latter may be correct but it showed neither imagination nor sympathy. I would like to add my letter condemning this action.—I am, etc.,

Longtown,
Cumberland.

G. M. INGALL.

SIR,—A few months ago I, with 18,000 other loyal members of the B.M.A., responded to the call from the leaders to be willing to resign from the National Health Service. The notices of resignation being held by the B.M.A. were to be a powerful weapon in negotiation. At the time I wrote to the Secretary expressing satisfaction with the firm stand being taken. Now those same leaders would have had us destroy the notices of resignation. Fortunately their view was not shared by the B.M.A. Council or the majority of B.M.A. members. In addition, as the recent Special Representative Meeting showed, approximately a third of members are extremists and still feel that negotiations would produce real results if the Minister and Government realized there was a three months' time-limit in which to negotiate to avoid collapse of the Health Service. I am not alone in thinking that under such circumstances a definite offer of more money and better terms of service would be forthcoming to keep us in the Service.

All we have been offered so far is (1) permission to borrow money (provided we comply with certain regulations) as from 1966, or more probably 1967. (2) Improvement in the present abused certification arrangements (cost to the Exchequer nil). (3) Part-payment towards ancillary help (already promised earlier). (4) Vague promises about the pricing of the contract. If it has taken hard bargaining to achieve that, the prospects when the work load and all-important pricing of the contract are negotiated seem bleak. I can imagine the feelings of the thirteen courageous Birmingham doctors who have already done what we were all asked to be prepared to do, when they saw their practices advertised in the *B.M.J.* for 26 June (p. xxv).

Surely that is the last straw.—I am, etc.,

Hull, Yorks.

GERALD P. OXBORROW.

SIR,—On behalf of the Salford Local Medical Committee I wish to protest against the acceptance for publication in the *B.M.J.* of an advertisement submitted by the Birmingham Executive Council (26 June, p. xxv), for vacancies on the medical list in Birmingham, created by the recent resignation of Birmingham doctors.—I am, etc.,

ROBERT HEWITT,
Hon. Secretary,
Salford Local Medical Committee,
Manchester 14.

SIR,—Not to have accepted the Birmingham advertisement (26 June, p. xxv) would have been foolish, for anyhow it appears