

later note by McClure<sup>2</sup> 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 estrogen 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 Gardini<sup>3</sup> mentioned three patients with carcinomas in the breast and prostate without oestrogen therapy. Guthorn,<sup>4</sup> Hertz,<sup>5</sup> and Treves and Holleb<sup>6</sup> reported single cases of such associations.

### 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.*<sup>1</sup> on measles, Aula<sup>2</sup> in chicken-pox, and Harnden<sup>3</sup> in yellow fever, Wiedemann<sup>4</sup> found recently in a 6-year-old

If, as Liebegott<sup>7</sup> 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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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.<sup>5-7</sup>

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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### 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 PCO<sub>2</sub> and PO<sub>2</sub> in patients with respiratory failure who are breathing ordinary air (20.9% O<sub>2</sub>): When PCO<sub>2</sub> is increased to 80–90 mm. Hg, PO<sub>2</sub> is usually decreased to 20–30 mm. Hg, 20 mm. Hg probably being the minimum tolerable arterial PO<sub>2</sub>. 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.<sup>1</sup>

(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<sup>2,3</sup> 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

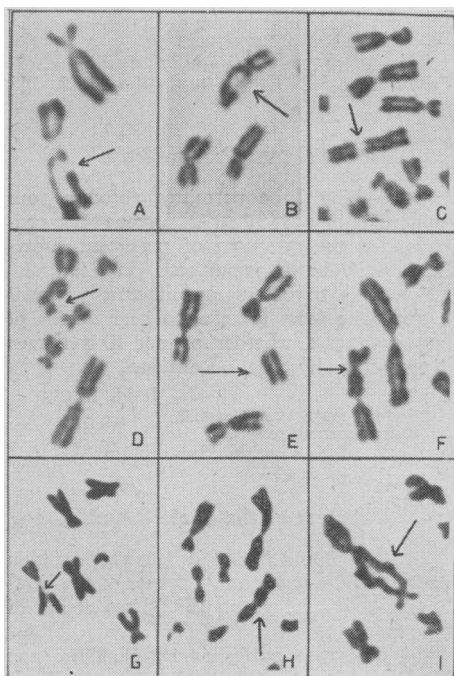


FIG. 1

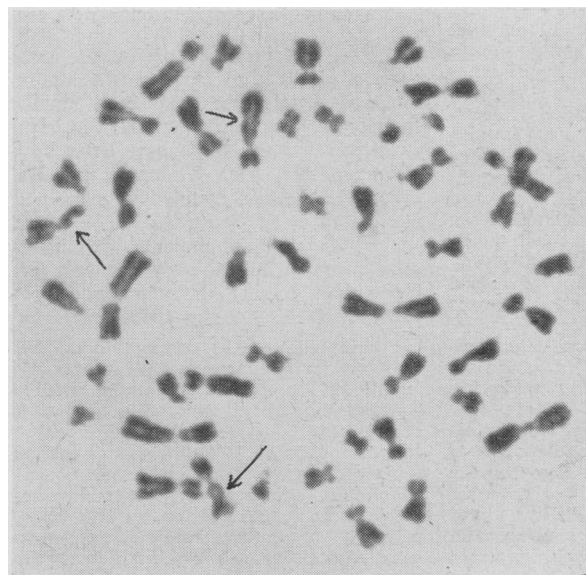


FIG. 2

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.