

* Uncertain whether maternal or paternal grandparent.

The patient's pedigree indicates that ichthyosis in this family is of the sex-linked type.7 The proband is the only female in the family affected with ichthyosis. The presence of sex-linked ichthyosis in this girl with only one X chromosome indicates that, in this case of gonadal dysgenesis, the paternal sex chromosome is missing.

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PSYCHOLOGICAL HAZARDS OF CONVALESCENCE AFTER MYOCARDIAL **INFARCTION**

SIR,—Dr. Risteard Mulcahy (June 12, p. 1236) asks on what evidence you base the recommendation in your editorial (May 22, p. 1055) that hard physical activity should not be undertaken within three months of a cardiac infarct. The only worth-while evidence would be derived from a large controlled series, half of whom restrict their physical activity and half do not, with a long follow up. Your recommendation is derived, not from evidence, but from a theory as to what is thought to happen to infarcted heart-muscle if the patient exercises. You are providing one more example of what I have suggested has been a supreme error of medicine throughout the ages—deriving treatment from theory.8

The unfortunate victims of cardiac infarction have suffered particularly badly at the hands of the theorists. Only a few years ago theory—which was slavishly followed in practice by a large proportion of physicians—condemned them to at least six weeks' strict bed rest (however small their infarct), to being compelled to lie flat and to be fed by nurses, at least for a week or two, and to various restricted diets. And, when they were cautiously allowed up, they were given strict injunctions to take things very easily (their wives being told to be firm in enforcing plenty of rest) and it was taken for granted they they would not return to any kind of work for months. All this gave them ample opportunity to ponder on the harshness of fate and to develop cardiac anxiety symptoms.

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JOHN W. TODD.

FLUORESCENT BODIES IN MATERNAL **CIRCULATION**

SIR,—It has been established that the presence of Y-chromosome-bearing peripheral leucocytes can be detected by staining a fluorescent body (F body).9 The accuracy of this technique has been questioned.10 A detailed study of peripheral F bodies in the circulation of pregnant women permits the evaluation of this technique. According to the work of Walknowska et al.,11 the circulation during pregnancy contains male fetal cells at a level of about 0.35% when the pregnancy results in a male. We obtained 10 ml. of peripheral blood from 32 primiparæ, and the number of F bodies was determined in 500-1000 peripheral lymphocytes of each using the above technique. The number of F bodies varied between 4.2 and 0.0%. The average number of F bodies was $1.08\% \pm 1.2$. However, the number of F bodies was not related to the sex of the subsequently delivered child in a statistically significant way (0.50> P > 0.40). This result would indicate that the presence of male cells cannot be detected with an accuracy greater than 2% and F-body determinations should not be used in situations where a greater accuracy is needed. This technique neither confirms nor disputes the findings of Walknowska's group.

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Andrew Zimmerman ROY SCHMICKEL.

Parliament

Experiments on Animals

In a debate on the findings of the Littlewood Committee on Experiments on Animals, which were published in April, 1965, Mr. MARK CARLISLE, Under-Secretary of State for the Home Department, said that the Government had not as yet given detailed consideration to the Committee's report, and he could not therefore enter into any commitment regarding future action. What emerged from the report was that at the time there existed a crisis of confidence over the control of animal experiments, but the committee had found that many fears were groundless. The risk of duplication of experiments was small, there was no evidence of serious wastage of animals, and there was no foundation for the suspicion that experimenters had no concern for the animals they used. However, administration of the Cruelty to Animals Act, 1876, had been placed under a great strain, and its provisions lately had not matched up to modern scientific and technological requirements. The committee, in fact, did not feel that there were any great abuses in need of urgent reform, but thought that the law should be modernised in order to facilitate the type of supervision already applied to animal experiments; the Government accepted the committee's The annual totals of experiments reported by licensees had steadily increased since 1963; the estimated total for 1970 was 5.65 million. Many of these experiments, however, caused the animal no pain. There seemed to be a widespread belief that implementation of the Littlewood report would drastically reduce the number of experiments, but this was not so.

Mr. F. A. BURDEN said that the Littlewood Committee had recommended that the inspectorate, which under the Act had to visit all registered persons from time to time, should be increased to 21, but there were still only 13 inspectors. In view of the growth in the number of animal experiments, some new advisory body should be set up to examine new proposals and guide experimenters on the complicated matters of technique, and suggest alternatives to vivisection. Mr. KENNETH LOMAS said that many of the committee's recommendations were already out of date; a new body should be set up to report inside 2 years, and its report debated within 2 years at the very most. Mr. JOHN STRADLING THOMAS strongly supported the sug-

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^{11.} Walknowska, J., Conte, F., Grumbach, M. M. Lancet, 1969, i, 1119.