Correspondence

Archives of Disease in Childhood, 1975, **50**, 575.

Ethic of taking blood samples in newborns

Sir,

The Editors have drawn our attention to the ethical justification for taking blood samples from newborns, as was done in our study 'Serum tri-iodothyronine, thyroxine, and thyrotrophin concentrations in newborns during the first 2 days of life' (Similä *et al.*, p. 565) and we are more than glad to discuss this aspect of our study.

The justification for taking blood samples in children has lately been the subject of discussion by several authors (European Society for Paediatric Research, 1973; Editorial, *Archives of Disease in Childhood*, 1973; Illingworth, 1974). In weighing up the ethics of any particular investigation, Illingworth suggests that three questions should be asked: (i) what good may it do? (ii) what harm may it do? (iii) what harm may be done by not doing it? We have tried to answer these questions in the case of our own study

(i) The study was aimed to give, and did give, new information on the adaptation of the pituitary-thyroid axis after birth. The results also showed clearly that screening tests for thyroid functions should not be done until after the age of 24 hours. Clear-cut data giving normal values from the same individual were not available before this study.

(ii) Although not all the venepunctures were undertaken in the course of routine laboratory studies, we stress that a puncture of a scalp vein in experienced hands carries no somatic risk. Neither are there any data in the literature suggesting psychic harm from taking blood samples in newborns. Heel and venous punctures must have been done in millions of newborns without any reports of possible psychic harm.

(iii) Without the detailed data deriving from the 10 newborns in this study, tests for diagnosing and screening congenital hypothyroidism might be wrongly timed and hence misleading.

In summary, we feel that the study gave new information, important both from the theoretical and practical points of view, and did not cause, as far as we can judge, any harm to the babies.

The ethical rules given in the Helsinki Declaration of WMA have been adapted for children by one of us (Kouvalainen, 1974). Rule IV is as follows: 'Consider the study plan from the point of view of the patient: you must *feel* that you have got the child's personal permission, even though he/she cannot speak to you'. In the referred study the authors did feel that in this sense the patients gave their permission for the study. However, we willingly accept that frank discussion of the ethics of paediatric clinical investigation in this connexion are justified and indeed of great importance.

SEPPO SIMILÄ, M.D.
Assistant Chief
KAUKO KOUVALAINEN, M.D.
Professor of Paediatrics
Department of Paediatrics,
University of Oulu,
90220 Oulu 22, Finland.

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Haemophagocytic reticulosis

Sir,

We read with interest the views on haemophagocytic reticulosis by Blennow *et al.* (1974). As has been postulated previously (Buist, Jones, and Cavens, 1971), the authors of this present report suggest that a state of chimerism is the cause of this disorder. However, we feel that the evidence presented is far from convincing.

The following observations are all against a state of chimerism. (1) The chromosome analysis in lymphocytes from peripheral blood revealed a normal male karyotype in all metaphases studied. (2) Typing the patient's red cells within the Rh system revealed no mixed field. (3) The antiglobulin test was repeatedly negative, and no irregular red cell antibodies were found in the serum. Previously reported cases of thymic alymphoplasia (Kadowaki *et al.*, 1965; Githens *et al.*, 1969) provide examples of proven chimeras.

Erythrophagocytosis experiments showed that in the presence of the patient's serum, monocytes phagocytosed red cells obtained from the patient and his mother. Phagocytosis of the patient's red cells occurred to a lesser extent. This difference has not been quantitatively recorded and appears from the data given to be based on insufficient experimentation using only one leucocyte donor. Thus, the hypothesis that a host versus graft reaction causes this disorder does not receive firm support from the *in vitro* experiments.

In future cases post-mortem findings would be valuable to show the histopathology of the lympho-