

Correspondence

DERMATOGLYPHICS IN SCHIZOPHRENIA

DEAR SIR,

It is unfortunate that the study of dermatoglyphics is confined to so few members of the medical profession, and that fingerprints and allied phenomena are not yet widely accepted as being of great interest in a variety of conditions. One such condition is schizophrenia, and certainly any work that might provide more precise information about the genetical aspects of this disease would be most welcome. Unfortunately, the paper by C. S. Mellor (*Journal*, November 1968, p. 1387), leaves a very great deal to be desired.

For example, early on, the author states that: "Tented arches, included with simple arches, have more acutely curved dermal ridges and a tri-radius in the centre of the pattern." Firstly, "simple" arches, as he calls them, are universally known as "plain" arches. Why does the author introduce a new nomenclature here? Secondly, he persistently refers to a triradius as a "tri-radius". Bisecting this word is quite novel, but the author does not justify this innovation in preference to the term which until this paper has been quite acceptable. Thirdly, he includes tented arches with "simple" arches, which is reasonable, says they have a "tri-radius", which is highly controversial, and then in Part II of the paper says "The ridge-count for an arch is 0, because the arch has no triradius" which is contradictory. By this stage of his paper the reader will note he now refers to "triradius". Perhaps the author has grown tired of his new word? Perhaps it means something quite different? The latter quotation is in itself incorrect, since not only do tented arches, included with "simple" arches, have a triradius (according to the author), but also there are many loops in which there is a single recurring ridge, a triradius, but a zero ridge count (Penrose, 1968).

In Part II of the paper, the author describes his results measuring the atd angle. So much information has been omitted from this section that his atd angle results, as published, are quite valueless. It is well known that the atd angle is in fact a measure of a large number of variables. These include pressure used in taking the palm print (Penrose, 1954), breadth of the palm, age of the subject, lateral displacement of the triradius t, and the degree of adduction or abduction of the fingers when the palm

print is taken. The latter may make a difference of as much as 8 degrees in two prints taken of the same person with the fingers maximally and minimally abducted. This is not to mention the one variable that the atd is designed to measure, namely, the degree of distal displacement of the palmar axial triradius t. The author has only partially excluded one such variable, age, in his paper. The significance of the rest of the variables are left entirely to the reader's imagination. Since it is theoretically possible for the cumulative maximal effect of all these variables to be of greater magnitude than any ordinary atd angle itself, it is very hard to see how any useful conclusions can be drawn from the published results.

The paper states that "The aim of the present investigation was to find an explanation for the widely different findings of previous investigators". Instead of doing this, the present paper has unfortunately only added to the confusion. One may at least be thankful that the author did not go as far astray as to publish photographs of fingerprints of schizophrenics showing "ridge dissociation", an incredibly rare phenomenon, which in fact were perfect examples of injuries which had healed by granulation, most probably burns (Raphael and Raphael, 1962).

One must conclude that, until the dermatoglyphics of schizophrenia are studied accurately, no conclusions can be drawn about the significance, if there is any, of the findings published to date on this extremely important subject.

T. J. DAVID.

*Cardiology Department,
Bristol General Hospital, Bristol 1.*

REFERENCES

- PENROSE, L. S. (1954). "The distal triradius t on the hands of parents and sibs of mongol imbeciles." *Ann. hum. Genet., Lond.*, 19, 10-38.
- (1968). "Memorandum on dermatoglyphic nomenclature." *Birth Defects Original Article Series*, Vol. IV, No. 3, June 1968.
- RAPHAEL, T., and RAPHAEL, L. G. (1962). "Fingerprints in Schizophrenia." *J. Amer. med. Ass.*, 180, 215-19.

DEAR SIR,

The import of T. J. David's letter is that most papers on dermatoglyphics in schizophrenia do not warrant serious consideration. It is not the psychiatric concepts which he has questioned, but the dermatoglyphic