

Correspondence

"MALVARIA"

DEAR SIR,

A new chemical syndrome called "malvaria" has recently been described (1, 2, 3) in which, it is suggested, an unknown chemical present in urine is identified as a purple spot after paper chromatography and spraying with Ehrlich's reagent. According to Hoffer and Mahon (1) this mauve factor is present in most of the urine of schizophrenics, whilst O'Reilly, Ernest and Hughes (3) found a high correlation between it and "thought changes". Such a concept implies that the source of the unknown substance is endogenous and not secondary to some dietary constituent, which possibility appears to have been ignored by both O'Reilly *et al.* and by Hoffer and Osmond.

It is well recognized that many urinary constituents are derived from the diet, others from bacterial action in the gut and subsequent absorption (4). Von Studnitz, Engelman and Sjoerdsma (5) showed that most of the urinary phenolic acids excreted by the normal subject were derived from exogenous sources. Commenting on the possibility of urinary chemical abnormalities in schizophrenia, Baldessarini and Snyder (6) stress that such abnormalities have not been confirmed in studies on subjects on a plant free diet.

Ehrlich's aldehyde reagent, used to identify the mauve factor, is not specific for any class of compound (7). Moreover, the chemical technique used by Hoffer (2), whose method O'Reilly *et al.* quote verbatim, is so incomprehensible as not to permit repetition.

However, by analogy with the work of Von Studnitz *et al.*, and of Perry on schizophrenia (8), it is clear that in research of this nature a rigid dietary control is essential. In its absence, the mauve factor might well be simply an indole whose increased excretion is secondary to a decreased faecal output (constipation, decreased food intake or dehydration). This hypothesis could account for O'Reilly *et al.*'s finding for instance, that 50 per cent. of their cancer patients, many of whom were receiving morphine-like drugs, were "positive"; or were they too experiencing "thought changes"?

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SLEEP PATTERNS AND REACTIVE AND ENDOGENOUS DEPRESSIONS

DEAR SIR,

In his letter (*Journal*, September 1965, page 905) Costello maintains that "clinical tradition shaped the collecting of the case history data". The data used in the paper by Kiloh and myself (1963) were not case history data; each patient was interviewed by either Professor Kiloh or Dr. Ball (Kiloh, Ball and Garside, 1962) and they used "an interview technique which was reasonably well standardized" (Kiloh, 1965). Costello, presumably, must have misunderstood his communication from Kiloh (1963).

It is true, of course, that the clinical opinions of investigators may affect the data they collect, but it is very difficult to avoid entirely the possibility of this kind of bias. Even so-called objective data have to be scored, recorded, manipulated and interpreted by someone. Our data were collected in a careful and systematic manner, and the subsequent analysis indicated a remarkably close fit between diagnosis and second factor loadings, even though the factor analysis included 51 additional doubtful cases. To