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EDITORIAL

ATARACTICS IN NEUROSIS

The recent tests carried out by a team of workers from the Department of Psychiatry at St. George's Hospital, London, merit careful consideration.[1] This group undertook to study the effects of various tranquillizers as subjectively felt by the patients and the experiments were carried out with great care so as to ensure that neither the patients nor their physician were aware of what drugs were being used, only the hospital pharmacist being in possession of the key. A placebo of lactose was used as a control and, in groups of six, patients were put on to certain tablets for a fortnight each. The results were classified according to the effect described by the patient himself. The patients were people 'comparable to those patients for whom sedation is commonly and properly prescribed in general practice'.

'No objective rating by the interviewing psychiatrist was attempted, for the aim of the enquiry was to find out how the patient felt, and the simplest way was to ask him'; and with these simple questions used as a criterion, five different drugs, each prescribed to be taken 3 times a day, were tested. The six sets of tablets were:—

1. Amylobarbitone ('Amytal').
2. Benactyzine ('Suavatil', 'Nutinal').
3. Chlorpromazine ('Largactil').
4. Meprobamate ('Equanil', 'Miltown', 'Mepavlon').
5. 'Sedaltine' (a poly-pharmaceutical preparation), and
6. Placebo (lactose).

After making due allowances for such patients as refused to co-operate and who had defaulted, the authors proceed to an analysis of their results. They found that 79 patients were included in the trial and that the great majority of them submitted a daily report on the response to each drug. They analyzed the variance in 7 groups of 6 patients and came to definite conclusions. Their final conclusion is significant; 'in terms of the patients' assessment, the average score for the placebo was close to a nil response, neither good nor bad; the average score for amylobarbitone was highly significantly superior to that of the placebo; there was no significant difference between the other four drugs and the placebo'.

The conclusions that are inescapable are that patients are unable to distinguish between the effects of many tranquillizers and that of the placebo, but that the effect of the barbiturate is unmistakeable. No report is given in this paper

VAN DIE REDAKSIE

KALMEERMIDDELS BY NEUROSE

Die onlangse eksperimente deur 'n span navorsers van die Departement Psigiatrie aan die St. George-hospitaal, Londen, verdien noukeurige aandag.[1] Hierdie groep het onderneem om die uitwerking van verskeie kalmeermiddels, soos die pasiënte dit self ondervind het, te bestudeer, en die toetse is met die grootste versigtigheid uitgevoer om te verseker dat die pasiënte en hulle dokters nie moes weet watter middels gebruik is nie. Slegs die hospitaalapteker was in besit van die sleutel. 'n Placebo van laktose is as kontrole gebruik; die pasiënte is in groepe van ses verdeel en 14 dae lank is elke groep met sekere tablette behandel. Die resultate is geklassifiseer volgens die pasiënte se eie verslae van die uitwerking van die tablette. Die deelnemers was mense wat vergelyk kon word met ,dié pasiënte vir wie kalmeermiddels gewoonlik en met reg in die algemene praktyk voorgeskryf word'.

,Die ondersoekende psigiater het nie probeer om die pasiënte se reaksies objektief te ontleed nie, want die doel van die toets was om uit te vind hoe die *pasiënt* voel, en die maklikste manier was om hom uit te vra'. 'n Stel eenvoudige vrae het as maatstaf gedien, en op hierdie manier is vyf verskillende middels, wat elk drie maal per dag geneem moes word, getoets. Die volgende middels is gebruik:

1. *Amylobarbitone* (,Amytal').
2. *Benactyzine* (,Suavatil', ,Nutinal').
3. *Chlorpromazine* (,Largactil').
4. *Meprobamate* (,Equanil', ,Miltown', ,Mepavlon').
5. ,Sedaltine' ('n polifarmaseutiese preparaat), en
6. Placebo (laktose).

Nadat rekening gehou is met pasiënte wat nie wou saamwerk nie en dié wat die reëls verontagsaam het, ontleed die skrywers die uitslae van hulle toetse. Hulle het bevind dat 79 pasiënte deelgeneem het en dat die meeste van hul daagliks verslag gedoen het oor hulle reaksies op die besondere middel. Hulle het die verskille tussen die 7 groepe van 6 pasiënte elk ontleed en definitiewe gevolgtrekkings bereik. Hulle slotsom is betekenisvol; volgens ,die pasiënte se evaluasie' was die gemiddelde telling vir die reaksie op die placebo nagenoeg nul—nog goed, nog swak; die algemene telling vir die amielobarbitoon was veelbetekenend hoër as dié van die placebo; en daar was geen betekenisvolle verskil tussen die ander vier middels en die placebo nie.

Die onvermydelike gevolgtrekkings is dat die pasiënt nie in staat is om te onderskei tussen die effekte van baie kalmeermiddels en dié van die placebo nie, maar dat die uitwerking van die barbituraat onmiskenbaar is. Die psigiater se berekening van die effekte van hierdie besondere middels

of the psychiatrist's assessment of the effects of the given drugs on his patients, and such a report will be awaited with interest. One is once again faced with the question: Who knows what is best for the neurotic, worried man, his doctor or the patient? In the meantime, the use of the tranquillizing drugs will be continued with some reserve.

It is well to reflect on the significance of these tests and their implications. The tests were carried out on a group of depressed, neurotic patients, and it has always been stressed that it is these very types who, in general, will not be benefited by ataractics. It is clear that the subjective feeling of depression in such patients will respond equally well to placebos and firm reassurance as to tranquillizers. One thing is certain: the indiscriminate use of tranquillizers, self-prescribed by depressed non-psychotics, must be stopped; if necessary by law.

But there can be no doubt of the value of certain of these new tranquillizers in the treatment of psychosis. Reports on their efficacy have been received from several countries.[2-5] As many psychiatrists are convinced that neurosis is not in any way allied to psychosis[6] and that the neurotic is no more liable to develop a psychotic condition than any normal individual, the place of the tranquillizer in therapy is thus becoming more and more clearly defined.

1. Raymond, M. J. *et al.* (1957): Brit. Med. J., **2,** 63.
2. Lomas, J. (1957): Brit. Med. J., **2,** 78.
3. Shulman, L. and Ginsburg, M. (1956): S. Afr. Med. J., **30,** 815.
4. Ginsburg, M. (1957): *Ibid.*, **31,** 175.
5. Freeman, H. (1956): New Engl. J. Med., **255,** 877.
6. Wolfe, J. (1956): S. Afr. Med. J., **30,** 542.

op die pasiënte word nie in hierdie referaat beskryf nie, en so 'n verslag word met groot belangstelling afgewag. Weer kom ons te staan voor die vraag: Wie weet die beste waarby die angsvolle, neurotiese mens baat vind—die dokter of die pasiënt self? Intussen sal die kalmeermiddels met 'n mate van versigtigheid toegedien word.

Dit is waardevol om na te dink oor die betekenis en implikasies van hierdie toetse. Die toetse is uitgevoer op 'n groep terneergedrukte, neurotiese pasiënte, en dit was nog altyd benadruk dat dit gewoonlik juis hierdie soort pasiënte is wat nie baat vind by kalmeermiddels nie. Dit is duidelik dat die subjektiewe emosie van terneergedruktheid by sulke pasiënte ewe goed reageer op placebo's en ferme gerusstelling as op kalmeermiddels. Een ding staan vas: die onoordeelkundige gebruik van kalmeermiddels deur terneergedrukte nie-psigote, sonder 'n dokter se voorskrif, moet gekeer word, desnoods deur die wet.

Maar dit is seker dat sommige van hierdie nuwe kalmeermiddels baie nuttig is by die behandeling van psigose. Verslae van hul doeltreffendheid bereik ons uit verskeie lande.[2-5] Baie psigiaters is daarvan oortuig dat neurose glad nie verwant is aan psigose nie,[6] en dat die neurotiese pasiënt nie méér geneig is as enige normale persoon om 'n psigose te ontwikkel nie. Die waarde van en aanwysings vir die kalmeermiddel in die terapie word dus al hoe duideliker omskryf.

1. Raymond, M. J. *et al.* (1957): Brit Med. J., **2,** 63.
2. Lomas, J. (1957): Brit. Med. J., **2,** 78.
3. Shulman, L. en Ginsburg, M. (1956): S. Afr. T. Geneesk., **30,** 815.
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ALLERGY TO FUNGI

While much advance has been made in our knowledge of the morphological and cultural characteristics of pathogenic fungi, information is scanty on the fundamental mechanisms of the reactions of the body to them. Certain features are common to infections with bacteria and viruses, and to drug reactions. It must be recognized that there are both immediate and delayed hypersensitivity reactions to fungi, for example to trichophyton infections, but the factors leading to these reactions have not yet been elucidated. Polysaccharide excites the immediate reactions while protein is responsible more for the delayed reaction.

Little attention has been paid in the delayed reaction to the earlier phases, and similar studies to those made in connection with the tuberculin reaction[1] need to be undertaken. The delayed fungal hypersensitivity reaction would appear to depend on certain similar factors and mechanisms. Thus the antigen introduced into the skin is subjected to mechanical and other forces affecting spread and dilution, and the one agent can produce opposing end results. Delayed reactions are weaker in a pyrexial patient, and this is due to increased absorption of antigen, not to a weaker action. Similarly, in a number of other conditions such as pregnancy, cachexia, venous stasis and oedema, the weaker reactions to antigen are believed to be due to enhanced removal of the antigen from the test site. In conditions with a high incidence of immediate reactions a low incidence of delayed reactions would be expected. Failure to obtain a reaction calls for a search for the factor that militates against the reaction; thus an agent with whealing effect will affect the reaction.

For histoplasmosis, trichophyton and other fungal infections the 'fixation', spread and absorption of antigen, and the reaction (antigen-antibody, and inflammatory) also need to be studied as has been done with the tuberculin reaction.[1]

Increased retention of the allergen may cause stronger reactions. This has been demonstrated experimentally, for example with depot vehicles and with adrenaline, and has been observed clinically in conditions where there is decreased vascular activity.

As far as antibody is concerned, much evidence shows the reticulo-endothelial tissue to be the source. It will be interesting to determine with fungal antigens whether the same immunological processes occur. Careful interpretation of reactions is required, for paradoxical effects may occur; alteration in local circulation, as indicated above, and decrease or increase in the local delivery of lymphoid cells, the important carriers of antibody, will determine the degree and the validity of the local reaction. With trichophyton tests paradoxes occur and the technique used in the study of tuberculin reactions should be employed. Until specific elements from different fungi become available, skin tests will be unsatisfactory. Antigen of varying potency makes testing unreliable.

1. Editorial (1957): S. Afr. Med. J., **31,** 925.