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Synopses of Papers Awaiting Publication

Urogenital Malformations Associated with Anorexia Nervosa. By K. A. Halmi and C. Rigas.

Three published reports of Turner's syndrome associated with anorexia nervosa prompted a survey of our hospital files for urogenital anomalies in anorexia nervosa patients. Of 87 patients diagnosed as having anorexia nervosa 59 satisfied the rigorous criteria of Feighner *et al.* Among the latter, five had urogenital abnormalities; one had Turner's syndrome with negative sex chromatin pattern, three malformations of the female genital tract (one of these also lacked a kidney), and one unilateral renal agenesis; in a sixth case a young woman had her breasts and genital tract surgically removed and assumed a male identity. In view of this remarkable frequency of association of anorexia nervosa with abnormalities of the urogenital organs, we suggest detailed urological and gynaecological as well as karyotype studies on patients with anorexia nervosa.

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'Maternity Blues'. By Brice Pitt.

One hundred women, selected at random, were interviewed in the lying in wards of a teaching hospital between the 7th and 10th days post-partum. Fifty had suffered a spell of tearfulness and depression ('maternity blues') since delivery. Anxiety and mild cognitive impairment were found to be associated with 'the blues'.

Significantly more of the mothers who suffered than those who did not suffer 'the blues' experienced difficulty in breast-feeding (at the 5 per cent level). There were, however, no significant differences between the groups in personality, menstrual trouble, parity, attitude to the pregnancy, experience of labour, the baby's health or social stress.

The evidence suggests that the syndrome is organically determined. A probable factor is the precipitate fall in oestrogen and progesterone levels after parturition, or an imbalance between the two hormones.

'Maternity blues' is a normal phenomenon, which needs to be distinguished from the more serious and protracted states of puerperal depression.

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Severe Shock Caused by Chlorpromazine Hypersensitivity. By Pang L. Man and Calvin H. Chen.

The question, 'If a patient who previously received chlorpromazine either parenterally or orally did not have a hypotensive reaction to the drug, would he be likely to develop hypotension when the drug is administered at a later date?' has never previously been raised. In this paper we present three cases of severe hypersensitive shock due to chlorpromazine. All three patients had received chlorpromazine in the past without adverse effects. On admission, they were psychotic, agitated, disturbed, combative and confused. Chlorpromazine—50 mg. was given intramuscularly to each one of them. Within 30 to 60 minutes the patients' blood pressure dropped—to zero in two of them and 70/50 in one. We believe that these patients were sensitized by the previous chlorpromazine medication and that the severe hypotension was the result of hypersensitivity.

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Familial Incidence of Gilles de la Tourette's Disease, with Observations on Aetiology and Treatment. By Patrick B. Friel.

This rare condition, characterized by multiple motor tics and an irresistible compulsion to swear, was first described by Gilles de la Tourette in 1885. He thought the disease might be hereditary. In this paper we present three cases occurring in the same family (two sisters and the son of one of them) and this is the first published familial incidence of the disease.

The cause of the condition is unknown. Clinical, neurological, electroencephalographic and chromosomal studies on all three patients failed to reveal any specific abnormality. Likewise, there were no

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significant psychopathological or psychodynamic patterns.

Psychotherapy and pharmacotherapy, including phenothiazines, tricyclic antidepressants and anti-anxiety agents, had no significant effect. Haloperidol, a butyrophenone compound, is uniquely effective in controlling the symptoms; the effectiveness of this potent central dopaminergic blocking agent supports speculation that the disease may be due to hyperactivity of dopaminergic systems in the corpora striata of involved patients.

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The Undiagnosable Psychiatric Patient. By AMOS WELNER, JAY L. LISS and ELI ROBINS.

This is a study of 25 out of 109 patients who had been discharged from a private psychiatric hospital without a definite psychiatric diagnosis—undiagnosed. These 25 patients, in contrast to the other 84, remained undiagnosed after re-evaluation of their records and after a personal follow-up of a mean of 46 months, and therefore were termed undiagnosable. These patients were divided into a 'sick' and a 'well' group.

There were 6 'sick' undiagnosable patients, and 4 of these were characterized by an abundance and a wide spectrum of symptoms enough to fulfil the criteria for multiple psychiatric disorders which seemed to us unlikely to occur simultaneously in one patient. In 2 of the 6, on the other hand, the clinical course resembled closely that of other patients who presented temporarily with depressive symptoms, and during the follow-up they developed additional symptoms to fulfil the criteria for hysteria.

'Well' undiagnosable patients had minimal if any psychiatric symptoms, except for the acute single event that resulted in the index admission to hospital; or had a primary medical disorder or a single symptom which was chronic; or had a moderate to severe single episode consisting of symptoms and signs that were still too few to meet the criteria for a psychiatric disorder, but their symptoms were close to meeting the criteria for schizoaffective illness.

It is emphasized that less than 1/4 of the initially undiagnosed patients were undiagnosable, and it is suggested that even that portion may be decreased by further follow-up.

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Persistent Dyskinesia. By GEORGE E. CRANE.

Up to 1967, some 40 articles had been published on tardive dyskinesia, and a total of 600 cases had been reported. Despite the high proportions of dyskinetic patients reported in populations treated with neuroleptics, the evidence that such motor disorders were drug-induced was only circumstantial.

During the past five years some 60 additional papers have appeared, with approximately 1,200 new cases. The literature from 1967 to 1971, which includes several controlled studies, seems to indicate that (a) tardive dyskinesia is a common occurrence in long-stay term hospital patients treated with neuroleptics; (b) neuroleptics play an important role, although symptoms similar to those of tardive dyskinesia may be observed in patients who have never received these agents; and (c) these side effects persist in a large proportion of patients after discontinuance of drugs. There is less agreement on the factors which predispose to this order. Similarly, information on its onset and evolution is still sketchy. There is definite evidence, however, to indicate that in the majority of cases abnormal involuntary movements develop only after several years of treatment.

The fact that symptoms become apparent after drugs are discontinued or the dosage is reduced has been reported by several investigators, thus confirming the findings of earlier studies.

Post-mortem findings have been inconclusive, but stereotaxic surgery has suggested that the pathology of tardive dyskinesia lies in the brain stem rather than in the striatal region. Abnormal metabolism of biogenic amines and hypersensitivity of specific receptors to dopamine also seem to play a role in the aetiology of this disorder.

Several types of drugs which influence the biochemistry of neuronal transmitters have been used for the control and treatment of tardive dyskinesia, but their effectiveness and safety need confirmation. A number of authors have also advocated the re-institution of neuroleptic drugs for patients who develop the disorder as the result of drug withdrawal, but the value of this treatment is doubtful in the absence of long-term clinical follow-up studies.

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The View-Point of the Mentally Subnormal Patient. By BRIAN R. BALLINGER.

174 patients resident in a mental subnormality hospital of 629 beds were interviewed using a standard

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series of questions. An attempt was made to obtain their opinions about their condition and care. Patients with intelligence quotients below 40 were excluded.

124 patients (71 per cent) did not regard themselves as being ill, and only 25 (14 per cent) of the sample attributed their admission to hospital to illness.

81 (47 per cent) favoured the present number of patients on their ward, whereas 16 (9 per cent) would have preferred more and 19 (11 per cent) fewer. 58 individuals (33 per cent) did not express a clear preference.

81 patients (47 per cent) were in favour of a hospital of the present size. 27 (15 per cent) expressed a preference for a larger hospital and 22 (13 per cent) favoured a smaller hospital. 44 (25 per cent) did not express a clear preference.

26 patients (15 per cent) said they would rather stay in hospital, 133 (76 per cent) expressed a preference for living elsewhere, whereas 15 patients (9 per cent) were not sure.

The difficulties in interpretation of these results are discussed, particularly with regard to the patients, limited intellectual capacity and social experience.

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Aspects of the Relationship between Sleep and Nutrition: A Study of 375 Psychiatric Out-Patients. By A. H. Crisp and E. Stonehill.

An hypothesis has been tested that sleep patterns, especially in the second half of the night, in patients presenting with a variety of psychiatric disorders and with disorders of weight such as anorexia nervosa or obesity are related to nutritional factors that transcend specific diagnostic and mood states. The present report concerns a population of 375 consecutive new patient referrals to a psychiatric out-patient clinic investigated by standardized measures of aspects of their sleep, weight, level of nutrition, and psychiatric and mood states.

A general finding has emerged of a relationship between weight loss, reduced duration of sleep, more broken sleep and early waking on the one hand, and weight gain, longer duration of sleep, no broken sleep and later waking on the other hand. This finding holds for states of severe depression and sadness as well as other diagnostic categories. Weight changes bore no such direct relationship to the time of getting off to sleep, which is found to be more closely related to mood states. However, major change in body shape is also found to be related to time of getting off to sleep. The overall results lend further support to the hypothesis, and it is suggested that nutritional factors may sometimes contribute to sleep disturbance presenting in a variety of disorders seen in the clinic.

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The Effect of Forewarning on the Occurrence of Side Effects and Discontinuance of Medication in Patients on Amitriptyline. By E. D. Myers and E. J. Calvert.

This study was carried out to investigate the effect of warning patients about the side-effects of amitriptyline. The experiment was designed to test the following hypotheses:

(1) Forewarning patients of the side-effects of a drug (amitriptyline) will result in a greater number of patients complaining of such effects.

(2) Where patients develop side-effects, discontinuance of therapy occurs less frequently if they have been warned of such effects.

One hundred out-patients suffering from depression were randomly allocated to one of two groups. Patients in Group A were forewarned about side-effects and patients in Group B were not forewarned. The patients were seen again after two weeks and questioned regarding side-effects and continuance of medication. 77·4 per cent of patients reported side-effects but analysis of the results indicated that informing the patients of possible side-effects neither affected the rate of their reported incidence nor the rate of failure to continue with medication.

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The Reason for Admission as a Focus of Work for an Adolescent Unit. By Peter Bruggen, John Byng-Hall and Tom Pitt-Aikens.

A description is given of the way in which an adolescent in-patient unit focuses its therapeutic work. It aims to supply an area service for younger adolescents by supporting families and agencies with offers of admission while the adolescent cannot be managed in the community. The initial work is with the referral agent, firstly over the telephone and secondly at a meeting.

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In 53 per cent of cases referred a plan emerged supported by an offer of a bed in future if needed, and this enabled the professional to keep the adolescent in the community. In the remaining cases the family was then seen as a group, often with the outside professional present. The reason for needing in-patient as opposed to out-patient treatment was explored. The social situation, e.g. difficulty in coping at home, which emerged was then used to focus the therapeutic work on those factors within the environment and in the adolescent's behaviour which made separation necessary. The work was thus directed towards avoiding admission if possible (successful in approximately half), or towards re-union in the 25 per cent of referrals finally admitted. Patients with a wide range of diagnostic categories were admitted by this method. Parental authority had often broken down where admission was necessary, and a description is given of how it was re-established and how the Unit's limit-setting enabled the adolescent to regain control over him-self. The length of stay was relatively short.

It is argued that for younger adolescents the avoidance of admission, or shorter admissions, is better than lengthy stays for a treatment process.

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An Age-specific Analysis of the Neuroses. By CARRICK McDONALD.

It is argued that age-specific distribution curves of psychiatric diseases, if derived from sufficiently heterogeneous concepts, adopt a fairly standard form. An analysis of age-specific hospital referrals of the sub-categories of neurotic illness shows a deviation from that standard form by the categories 'hypo-chondriasis' and 'mixed neurotic illness'. These classes show a rise in hospital referral in the upper age range. It is argued that greater somatization of neurotic symptoms with increasing age leads to failure to refer such cases to a psychiatric department and hence accounts for the difference found between incidence and prevalence rates for neurosis in the upper age range.

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The Use of Clustering Techniques for the Classification of Psychiatric Patients. By JOHN S. STRAUSS, JOHN J. BARTKO and WILLIAM T. CARPENTER, JR.

In the search for improved techniques for classifying psychiatric patients, cluster analysis provides an alternative to the usual clinical diagnostic methods. This report demonstrates, however, that different methods of preparing data and different clustering techniques produce different classifications of patients. From these findings criteria are suggested for selecting cluster methods for use with psychiatric data. Based on these criteria the most promising cluster technique for one kind of data was determined. This technique was then used to classify a sample of patients. It produced groups that resembled clinical diagnostic categories but went beyond the assigned diagnoses to classify the patients by other clinically relevant criteria as well.

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Redundancy, Repetition and Pausing in Schizo-phrenic Speech. By GERALD SILVERMAN.

Samples of tape-recorded speech were obtained from actively psychotic and non-psychotic subjects. Transcripts of these samples were submitted to cloze procedure, involving regular deletion of every 'nth' word and attempted restoration of these deletions by a panel of normal subjects. Two forms of cloze procedure were used, the usual technique of deleting every 5th word and also a modification deleting every 4th word. As in a previous study by the author, the latter technique proved to be more sensitive for distinguishing between psychotic and non-psychotic speech. The Cloze Score, being the percentage of deleted words accurately restored, is an index of both comprehensibility and also redundancy in a text. The type-token ratios for these transcripts were also calculated giving an index of vocabulary diversity and, reciprocally, of verbal repetition. Rank order correlation coefficients were calculated for Cloze Scores and type-token ratios, and these were statistic-ally very significant, though for the 4th word deletion procedure only. This supports an hypothesis that inappropriate repetition is responsible for a consider-able part of the reduced communicability of schizo-phrenic speech. The recorded samples were also analysed for the extent of pausing, since it was further hypothesized that there might be reduced pausing in the more disorganized samples; pausing in sponta-neous speech has been shown to be a function of information processing and verbal planning. There was no correlation between the pause-speech ratios and Cloze Scores. In two hypomanic subjects, how-ever, there were very significantly reduced pause-speech ratios and these subjects had paradoxically high type-token ratios associated with very low Cloze

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Scores. Both these subjects were probably hypomanic, and the evidence seems to suggest a fundamentally different type of language disorder in hypomania as opposed to schizophrenia. The discussion of these results particularly stresses the crucial effect of different choices of technique upon results obtained in this field.

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A Psychological and Physiological Evaluation of the Effects of Intravenous Diazepam. By DESMOND KELLY, ROBERT PIK and CHAR-NIE CHEN.

Intravenous diazepam (10 mg.) was infused into 15 anxious patients for 10 minutes immediately following a similar 'placebo' infusion of diazepam solvent. On the Clyde Mood Scale the patients were significantly less 'Dizzy' ('sick to the stomach, dizzy, jittery and shaky') and less 'Unhappy' ('sad, down-hearted, troubled and worried') 35 minutes after the end of the diazepam infusion. There were significant reductions in Observer and Self-Ratings (OR and SR) of anxiety, and these were accompanied by a significant reduction in physiological arousal, as evidenced by a fall in forearm blood flow (FBF) and heart rate (HR), by the end of the experiment. It is likely that these changes were due to the diazepam. The mean values of OR and SR were significantly less during 'Diazepam' than 'Placebo', but the difference in FBF and HR was not significant. The maximum reduction in anxiety (OR and SR), and physiological arousal (FBF and HR), occurred 20–30 minutes after diazepam administration ended.

Five normal controls were significantly less 'Clear-thinking' on the Clyde Mood Scale 35 minutes after 5 mg. of i.v. diazepam.

Diazepam produced cutaneous vasodilatation, but no significant changes in respiration, sweat gland activity or blood pressure.

The findings are discussed in relation to the clinical use and mode of action of the benzodiazepines.

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Serum Magnesium, Diagnosis, ECT and Season. By M. W. P. CARNEY, B. F. SHEFFIELD and J. SEBASTIAN.

Serum magnesium estimations were carried out on 213 psychiatric patients and the mean values for the various diagnostic groups compared with that for 19 healthy volunteer controls. The pre-ECT levels in endogenous and neurotic depressives were low, and after ECT normal or raised. Those of the manic (before and after ECT) and untreated schizophrenic patients were also elevated. These phenomena could possibly have been due to a local seasonal variation in serum magnesium for 1970–71, low levels occurring in the spring and higher concentrations in the summer and autumn, combined with an uneven distribution of cases throughout the year.

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Neurotic and Thyrotoxic Anxiety: Clinical, Psychological and Physiological Measurements. By S. GREER, I. RAMSAY and C. BAGLEY.

The aim of this study was to compare clinical ratings of anxiety with independent psychological and physiological measures in patients presenting with anxiety symptoms associated with either neurotic anxiety states or thyrotoxicosis. Degrees of anxiety were assessed clinically and rated on a global 5-point rating scale. The IPAT Anxiety Scale Questionnaire was administered. Palmar skin conductance was measured in terms of: changes in skin conductance before and during auditory stimulation, psychogalvanic response (PGR), habituation of PGRs to auditory stimuli of varying duration, and number of spontaneous fluctuations. To avoid bias, clinical ratings were completed before patients filled in the IPAT Questionnaire, and results of the clinical and psychological tests were not available to the investigator who measured skin conductance.

Thirty-one patients, including 17 with anxiety states and 14 with thyrotoxicosis, were studied. No significant differences were found between patients in either diagnostic group in respect of the above measures. A highly significant correlation between clinical ratings of anxiety and IPAT Anxiety Scale scores was demonstrated. None of the physiological measures were significantly correlated with clinical ratings of anxiety. The present results cast doubt upon the reliability and validity of skin conductance measures as indices of anxiety.

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Propranolol in Neurotic and Thyrotoxic Anxiety. By I. RAMSAY, S. GREER and C. BAGLEY.

The effect of D-L-propranolol on anxiety was studied in thyrotoxic patients and in patients with neurotic anxiety states in a controlled, double blind, cross-over trial. Each patient received propranolol

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160 mgm. daily and placebo, administered alternately in random order for two fortnightly periods. Outcome was assessed in terms of: (i) clinical ratings of anxiety, (ii) the IPAT Anxiety Scale Questionnaire, and (iii) various measures of palmar skin conductance. No significant differences between propranolol and placebo were found in respect of clinical ratings and psychological test measures of anxiety among patients in either diagnostic group. There was a significantly greater fall in palmar skin conductance with propranolol than with placebo among thyrotoxic patients only. In the anxiety state patients a significant improvement in anxiety levels (as measured by clinical ratings and IPAT scores) had occurred at the end of the trial, irrespective of the order of administration of propanolol and placebo. It is concluded that propranolol has no demonstrable advantage over placebo in relieving anxiety among patients with anxiety states or with thyrotoxicosis.

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The Depression of Widowhood at Thirteen Months. By PHILIPP E. BORNSTEIN, PAULA J. CLAYTON, JAMES A. HALIKAS, WILLIAM L. MAURICE and ELI ROBINS.

A randomly selected group of 109 white widows and widowers who had been evaluated one month after the deaths of their spouses were reinterviewed 12 months later. Four of the original group had died, and 92 of the remaining 105 subjects were available for interview.

Using specific criteria for depression, 17 per cent of the subjects were found to be depressed at follow-up. The strongest predictor of depression at 13 months was the presence of depression at one month (12/16). Depression in the group had declined over the year from 35 per cent to 17 per cent.

The 16 depressed subjects were compared to the 76 non-depressed subjects on a number of demographic, personal and physical variables. As was true at one month after the death, there were minimal differences in the two groups. The depressed group had more additional symptoms of depression (besides those used to make the diagnosis) and more lack of support (physical, emotional, and financial); thus they more often lived alone, were more likely to have very low incomes, and had less previous religious affiliation. The depressed group had less previous experience with death. Family history of psychiatric illness, personal history of psychiatric illness, physicians, visits, most physical symptoms, and use of sleeping medicines and tranquillizers, showed no difference between the two groups.

Although 17 per cent of this population were depressed one year after the death, only 2 per cent (2 out of 109, neither in the depressed at one year group) sought psychiatric help, so this condition should not be grouped with the depressions of psychiatric patients.

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Myasthenia Gravis and Schizophrenia—A Rare Combination. By N. L. GITTLESON and T. D. E. RICHARDSON.

A survey of the literature reveals the infrequent coincidence of schizophrenia and myasthenia gravis in the same patient. Such a patient is described in this paper. The possibility of a mutual antagonism is suggested.

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Anterior Bifrontal ECT: A Clinical Trial. By RICHARD ABRAMS and MICHAEL ALAN TAYLOR.

An open clinical trial is reported of a new technique of treatment electrode placement for ECT, termed anterior bifrontal ECT (ABF/ECT). This method was suggested by Inglis to minimize the memory-loss of both dominant and non-dominant hemisphere dysfunction by keeping the direct effects of the electric current as far removed from *both* temporal lobes as possible.

Seventeen depressed in-patients received courses of eight ABF/ECT, given daily on weekdays. Memory performance and the severity of the depressive illness were evaluated before treatment and after termination, using the Wechsler Memory Scale and the Hamilton Rating Scale for Depression. ABF/ECT significantly lowered depression scale scores, and comparison with data from a previous study showed these changes to be intermediate between those produced by bilateral ECT (B/ECT) and unilateral ECT (U/ECT).

Significant changes in Wechsler Memory Scale scores were not obtained with ABF/ECT, and this finding is similar to that reported in the past for daily administration of U/ECT.

These data fit an hypothesis linking the depression-relieving and dysmnesic effects of B/ECT to bilateral temporal lobe stimulation, and account in part for recent observations that U/ECT and B/ECT have different effects on the clinical state and memory function of depressed patients.

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