

PHYSIQUE OF ENDOGENOUS PSYCHOTIC FEMALE PATIENTS

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Abstract. In the light of the basic findings of KRETSCHMER's somatoscopic school of psychiatric motivation (that namely the leptosome physique displays close connection with schizophrenia and the picnic one with the cyclic psychoses) the authors have made an attempt at classifying the endogenous psychotic patients on a phenotypic basis. For establishing the clinical diagnoses they used LEONHARD's classification. The sample examined by them consisted of 168 female patients, the age of whom varied between 18 and 63 years; all were Hungarians. Over and above comparing the cyclic psychotic and schizophrenic groups, they formed three subgroups within the schizophrenic form (cyclophrenia, systemic schizophrenia, non-systemic schizophrenia). They elaborated the somatometric data by means of cluster analysis and determined the phenotypes of the patients with HEATH—CARTER's method. They found significant differences between the single subgroups and, on the basis of their results they outline a sketch of succession among the different constitutional data of the endogenous psychotic patients.

Key words: physique, endogenous psychotic female patients, systemic schizophrenia, non-systemic schizophrenia, cycloid psychosis.

Introduction

It is a well-known fact, that a fundamental connection has been found by KRETSCHMER (1931) between the mental disorder and the physique of the patient, that can serve as a theoretical starting point of any typological approach. BUDAY (1943) in his monograph about constitution underlined the role of physique in medicine. Let us refer to one of his illustrations (Fig. 1) which, founded on data of 10.000 medical case histories, demonstrates diseases with positive correlation. An earlier examination (KELEMEN—PETHŐ—FELSŐVÁLYI 1977) indicates the existence of constitutional differences within the group of schizophrenic diseases. The aim of our present examinations is:

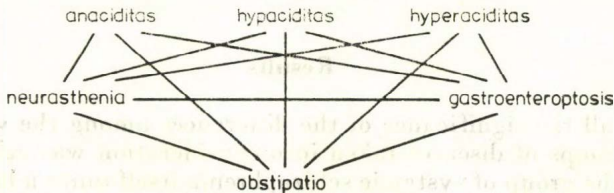


Fig. 1: Diseases with positive correlation: an example on the basis of the data of 10.000 medical case histories (after BUDAY, 1943)

1. the collection of fundamental constitutional data, about the subgroups of endogenous psychoses;
2. the reexamination of a hypothesis according to which, between the victims of the two main groups of endogenous psychoses — i.e. melancholic psychoses and schizophrenia — there are constitutional differences. In our opinion this fact is important either from a psychiatric or from a human biologic point of view.

Material and Methods

To diagnose with prognostical efficiency according to LEONHARD's (1957) method and to follow up the pathologic process is reasonable, because with their help one may differentiate the various supposed groups of diseases within the heterogenous spectrum of schizophrenia. Three groups of diseases within the circle of schizophrenia are dealt with in the present paper:

1. *systemic schizophrenia* with gradual aggravation (33 hebephenic, 11 systemic catatonic and 26 systemic paraphrenic patients);

2. *non-systemic schizophrenia* with periodic aggravations and recoveries (23 affect-paraphrenic and 16 periodic-catatonic patients);

3. *cycloid psychosis (cyclophrenia)* with long symptomless periods between two relapses following one another. The diseases with such courses are generally regarded as mixed forms of maniac-depressive psychosis and schizophrenia (28 such patients were examined).

In addition to this, we examined 29 melancholic patients (from these there were 15 manic-depressive ones).

Our sample was taken from among the patients of the Psychiatric Clinic Semmelweis University Medical School, Budapest, and consists of 168 female patients. Their age is between 18 and 63 years. They are all Hungarian belong to the Europid race and each of them suffers from endogenous psychosis. In this sample there are 3 psychotic patients (one melancholic and two schizophrenic) who cannot be fitted in either of the previously mentioned groups. 63 measurements — among others 7 head and face measurements — were taken of each of them.

It seems necessary to increase the number of our sample because more detailed subdivisions would be required in the future. Recently the HEATH—CARTER anthropometric typization (CARTER 1975), and, with the purpose of obtaining information on the accumulation of the data, a hierarchic cluster analysis has been carried out by means of the R-20 type computer of the Computational Technological Department of the Semmelweis University Medical School in Budapest. Besides this, we also determined the somatotype of the patients suffering the various psychotic diseases.

Results

- I. First of all the significance of the differences among the various features of the four groups of diseases taken into consideration was calculated.

1. Within the group of systemic schizophrenia itself quite a lot of differences could be recognized. Significance (on a .05 per cent level) of differences between the hebephenic and systemic paraphrenic patients as well as between the

systemic catatonic and paraphrenic patients was manifested in 28 features. In both respects the measurements of width, circumference and skin folds proved to be considerably larger in case of paraphrenics.

2. Within the group of the non-systemic schizophrenic patients definitive divisions could not be recognized. Their isolation from the melancholic group, as well as, from the group of systemic paraphrenics seemed to be pronounced.

3. The cyclophrenics significantly differ from the systemic paraphrenics in 15 features. However, their measurements of height surpass those of the paraphrenics; their measurements of width and of skin folds are falling behind those of the paraphrenics. The cyclophrenics differ from the hebephrenics mostly in respect of height; in general, the cyclophrenic measurements are larger (but the situation is reversed in case of the measurements of width). This tendency was more expressed in an earlier assesment (KELEMEN et al. 1977).

4. In melancholic patients no substantial differences can be proved between monopolar (or: periodic) depression and psychosis maniaco-depressiva, and both show few significant differences only, in contrast to the group of cyclophrenics.

5. Comparing the 29 melancholic patients with the 139 schizophrenic ones, significant differences proved to exist also in the measurements of width, circumference and skin fold (the greater measurements are taken from the melancholics).

II. The cluster-formation calls attention to the circumstance that to deviding our sample into too small subgroups would be unworthy. On the level of the 5.441 intergroup value four units can be formed (the figure in parentheses stands for the number of individuals belonging to the given group):

1st group: mainly depressive (5) and manic-depressive (8) patients, as well as systemic paraphrenic (6) ones;

2nd group: cyclophrenic (17) group with systemic catatonic (3), hebephrenic (7), periodic catatonic (5), affect-paraphrenic (3), depressive (4) patients;

3rd group: systemic paraphrenic (11) group with systemic catatonic (2), periodic catatonic (2), manic-depressive (4) patients;

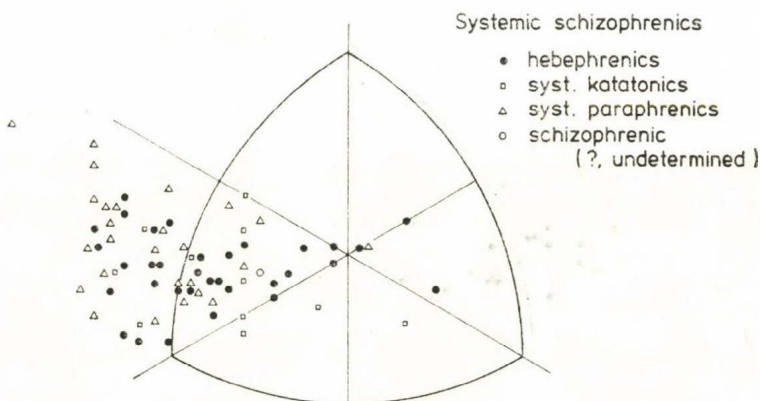


Fig. 2: Somatotypes of the systemic schizophrenic female patients

4th group: hebephrenic (16) group with systemic catatonic (5), periodic catatonic (7) patients.

III. The anthropometric somatotyping of our patients, has been carried out (CARTER 1975). A further qualitative analysis on the basis of standard photos (SHELDON et al. 1940) is in progress. The results yielded by somatotyping do not indicate appreciable differences among the groups, moreover, no well-defined differences can be recognized when comparing them with the data of fertile females taken as control group, either (EIBEN—SÁNDOR—LÁSZLÓ 1974) (Figures 2—6).

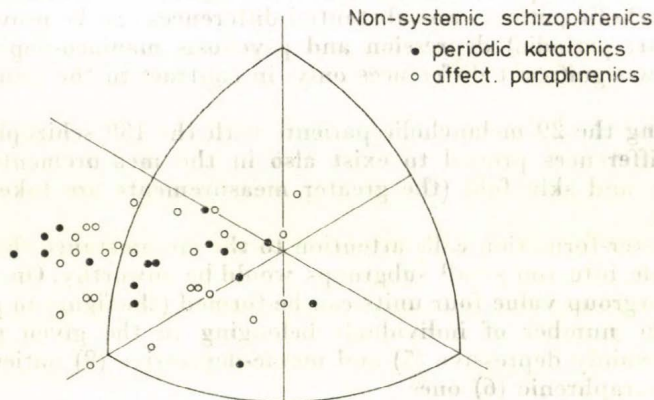


Fig. 3: Somatotypes of the non-systemic schizophrenic female patients

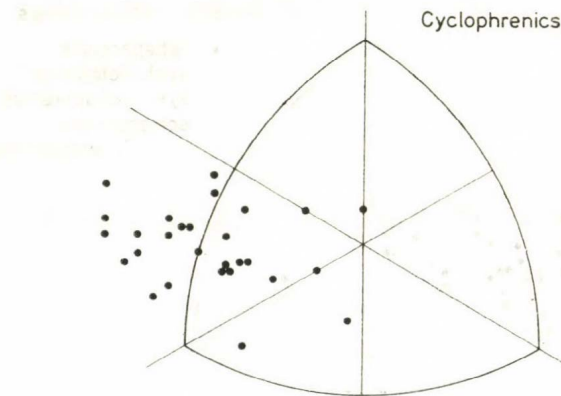


Fig. 4: Somatotypes of the cyclophrenic female patients

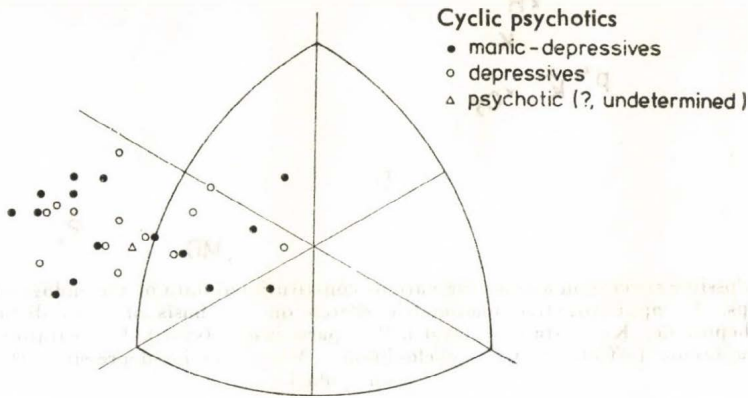


Fig. 5: Somatotypes of the depressive female patients

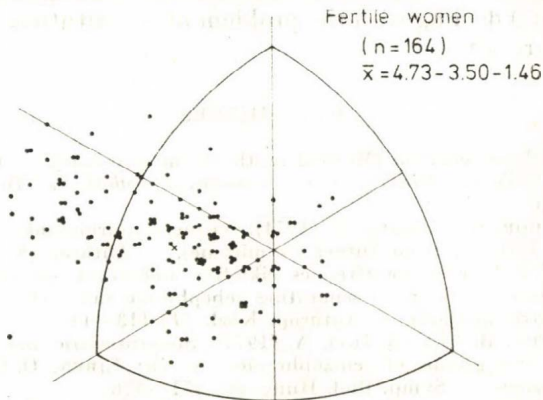


Fig. 6: Somatotypes of fertile women (EIBEN et al. 1974)

Discussion

1. The measurement differences among the various groups generally refer to the values of width, circumference and skin fold.

2. The absolute values of the measurements are largest in the systemic paraphrenic and smallest in the hebephrenic patients. Thus the group of systemic schizophrenic patients is definitely divided into subgroups.

3. The differences among the various groups — relying on the results of the *t*-test — outline the following line of succession: *systemic schizophrenia* — *non-systemic schizophrenia* — *cyclophrenia* — *melancholic diseases*.

4. This linear sketch can be logically modified with a view to the results of the cluster analysis, as shown in Fig. 7.

5. However, the results of somatotyping did not refer to expressed differences among the various groups; the comparison of the body measurements (primarily the data of the subcutan fat) in the melancholic patients shifts towards endomorphism.

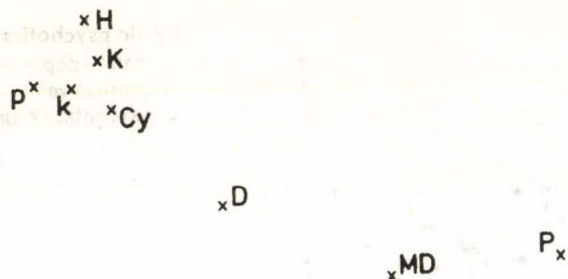


Fig. 7: Possible succession among the various constitutional data of the endogenous psychotic subgroups. An approximative planimetric sketch on the basis of main distances, where H = hebephrenic, K = catatonic (syst.), P = paraphrenic (syst.), k = catatonic (periodic), p = paraphrenic (affective), Cy = cyclophrenic, MD = maniac-depressive, D = depressive (monopolar)

The aim of this paper is to report on the present state of our work far-reaching programme (a manifold, catamnestic examination of endogenous psychotic patients) dealing with the problem of constitution, and to summarize our preliminary results.

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