Interpretation. The therapeutic approach investigated is feasible and successful for patients with relatively good prognosis.

The reported statistical correlation's however do not indicate any principle superiority for a neuroleptic-free treatment, as only those patients resistant to other therapeutic methods received drugs. While encouraging, these observations are in need of further confirmation and more detailed analyses in the presently ongoing prospective longitudinal research.

- No. 124 Driessen, M., & Balck, F. (1991). Chronic renal failure: Predictors of a good adaption to disease and treatment. [Chronische Niereninsuffizienz: Prädiktoren für eine günstige Adaption an Krankheit und Behandlung.] Psychotherapie, Psychosomatik, Medizinische Psychologie, 41, 362-371. (34 Ref., 1 Fig., 5 Tab.)
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Introduction and Investigation Targets. Previous research has revealed the high prevalence of psychiatric comorbidity (about 50%) among patients suffering from chronic renal failure. Knowledge of the most important factors influencing adjustment to disease and treatment, however, is still slight and disunified according to the theoretical background of the authors. Therefore the present study addresses the following questions:

- 1. Which of the most discussed somatic, psychic and social factors are able to predict a good adaption to disease and treatment?
- 2. Are there different predictors important for different aspects of adaption?
- 3. Are there different predictors important for different subgroups of patients?

Sample and Methods. N = 109 patients, 20 to 65 years old ($\bar{x} = 48.2$), were studied; 73% of them were married, 52% retired. 51% of these patients had survived a transplantation (N = 41). N = 25 were living in the status of compensated retention, n = 43 were undergoing hemodialysis. Using standardized psychological tests and a semi-structured interview, the patients were asked about: their psychic and somatic state of health, psychosomatic complaints, subjective fitness, social life and economic status; physiological parameters were noted. 13 internists were asked to judge the patients' adaption referring to general health, compliance, frequency of complications (requiring dialysis) and quality of cooperation. The patients' data about psychic and social parameters were factor-analyzed; these reduced data were subjected to stepwise discriminate analysis in order to show their predictive power for the physicians' judgment.

Results. The different adaption criteria are shown to be sufficiently distinct variables (Pearson's r); patients undergoing dialysis were judged most poorly $(p \le .002)$, sociodemographic variables do not influence the judgment (Excep-

tion: Age over 60 and general health; p < .01). Overall we were successful in predicting the adaption criteria in 75-85%.

Predicting general health: ((1) or (1) indicate the level of a variable, high or low, which best correlated with the predictive power): Referring to the whole sample, pathophysiological parameters: (Serum-) level of phosphate and creatinine (1), hemoglobine (1), diastolic blood pressure (1) and depression (1) showed strong predictive power. Referring to the subgroups, phychosocial variables become more important than pathophysiological factors. Compensated retention: Diastolic blood pressure (1), psychosomatic complaints (1), depression (1), aggression (1), length of partnership (1). Dialysis: Level of calcium (1), hopelessness (1), depression (1), anxiety (1), aggression (1), length of partnership (1). Transplantation: Level of calcium (1), disorders of fitness (1), inhibition of aggression (1), financial income (1), social contacts (1).

Predicting cooperation (with the staff): Here we found the same phenomenon as mentioned above: Referring to the whole sample, pathophysiological variables showed a strong predictive power: (Serum-)level of phosphate and creatinine (\downarrow), calcium (\uparrow); moreover, partnership was important: frankness to the partner (\uparrow) and closeness between partners (\downarrow).

Compensated retention: calcium (\uparrow), depression (\downarrow), anxiety (\downarrow), financial income (\downarrow), closeness between the partners (\downarrow).

Dialysis: calcium (\uparrow), psychosomatic complaints (\uparrow), aggression (\downarrow), inhibition of aggression (\uparrow), satisfaction of socioeconomic status (\uparrow).

Transplantation: calcium (\uparrow), psychosomatic complaints (\uparrow), aggression (\uparrow), subjective emotional frankness towards others (\uparrow), patients' dominant role in the partnership (\downarrow).

Predicting compliance (diet and restriction of fluid): Compensated retention: Physicians' judgment of a good compliance were best predicted by the following variables: diastolic blood pressure (\psi), aggression (\frac{1}{2}), subjective emotional frankness to others (\frac{1}{2}) social class (\psi), socioeconomic satisfaction (\frac{1}{2}). Dialysis: (Serum-)level of calcium (\frac{1}{2}), creatinine pre vs. post dialysis procedure (\frac{1}{2}), amount of years undergoing dialysis (\frac{1}{2}), depression (\frac{1}{2}), frankness towards the partner (\frac{1}{2}). Transplanted patients were not analyzed. Predicting frequency of somatic complications (only dialysis): diastolic blood pressure (\frac{1}{2}), phosphate (\frac{1}{2}), depression (\frac{1}{2}), social contacts (\frac{1}{2}).

Discussion: We were successful in predicting the internists' judgment of adaption quality to a high degree. It could be shown that there is no simple overall valid pattern of a good adaptation to chronic renal failure; instead different aspects have to be taken into account separately. Moreover most of analyzed physiological parameters lose their predictive power if subgroups of patients in different settings of treatment are analyzed. These results reflect different demands on a successful adjustment to the patients. Although there are some inconsistencies with the results, we formulate some hypotheses about the main predictor variables: 1. Depression and inhibited aggression play an extraordinary role in the life of all patients with chronic renal failure. 2. Al-



though there is no doubt about some well-known psychological model of development of depression, it may also be a consequence of secondary hyperparathyreoidism. Consequences for practical care and further research are discussed.

No. 125 Eye, A. von, Lienert, G. A., & Wertheimer, M. (1991) Syndrom combinations as composite syndromes detected by CFA. [Syndrom-konbinationen als Metasysteme in der KFA.] Zeitschrift für Klinische Psychologie, Psychopathologie und Psychotherapie, 39, 254-260. (19 Ref., 1 Tab.)

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Configural Frequency Analysis (CFA; Krauth & Lienert, 1973; von Eye, 1990) is a method for identifying local associations between variables. Such associations are termed *types* if configurations, that is, patterns of variable states, occur more often than expected by chance. They are termed *anti types* if they occur less often than expected by chance. In clinical contexts, types are often called *syndromes*.

This paper deals with combinations of syndromes, that is, with combinations of symptoms which are often predicted by a specific theory and are also termed composite syndromes. The paper describes how CFA can detect such syndromes.

As a sample case the "classical" data describing the Leuner's Syndrome are used. Theory predicts one trisymptomatic and three monosymptomatic syndromes. The trisymptomatic syndrome involves clouding of consciousness, thought disturbance, and affective responses whereas the monosymptomatic syndromes involve only one of these three.

A confirmatory test against composite syndromes involves the following four steps:

- 1) Estimation of expected cell frequencies from the log-linear model of total variable independence; this model postulates that variables are totally independent of each other; it only considers main effects when estimating expected cell frequencies;
- 2) Calculation of the standard normally distributed residuals, u_i, for each of the configurations that is expected to be part of the syndrome;
- 3) Summation of these residuals; the resulting sum is also a standard, normally distributed test statistic; and
- 4) Calculation of the tailed probability for sum of residuals.

Application of confirmatory CFA to the sample data reveals that the composite syndrome involving all four of the above syndromes does exist in the sample data.