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EDITORIAL

Active Therapy and Brain Organization

Feinberg (1982/83) has introduced a hypothesis relating schizophrenia emerging in adolescence to a defect in synaptic "pruning" normally occurring as a maturation process that is particularly active during that period. The basic issues of this hypothesis stem from information related to a sharp fall in the amount of deep sleep (EEG recording), and metabolism going hand in hand with the appearance of better abstract thinking, emergence of adult problem solving abilities and diminished latency of certain cognitive tasks (event-related potentials). Such "more" and "less" alterations could be related to reported diminution of synaptic density in relation to age (Huttenlocher, 1979) particularly during adolescence.

According to Feinberg, the neural substrate for thought and behaviour changes (particularly in adolescence) result from a programmed decrease in synaptic density. An error or defect in this process gives rise to schizophrenia.

In principle, this hypothesis opens a promising path for the better understanding of brain maturation and organization throughout the life span. It re-establishes a significant inter-relation between function and structure (and vice versa) of the neuronal organization of the brain. "It is well known that mature axons sprout and make additional synapses if their target is partly deprived of innervation and conversely, that adult axons can reduce the number of synapses they make on target cells under a variety of conditions". (Purves, 1980). Such approach may parallel the suggested scheme for thought organization in terms of a central or goal idea (Arieti, 1974) and related thought organization (Rakhawy, 1979). Could the lack of a centri-

petally attracting central idea in schizophrenia be both a cause - and effect of the failure in appropriate neuronal elimination and synaptic pruning?

If so, could the therapeutic approach differ accordingly? Therapy - whether intentionally or not - may be acting as a significant variable in the process of neuronal elimination and reorganization in critical impasses of abnormal unfolding. Therapy aims at converting such abnormal unfolding into a normal one.

Feinberg's hypothesis emphasizes early infancy and adolescence as two major maturation crises associated with synaptic elimination and reorganization. By analogy we can expect that a similar vulnerability and/or alteration could take place in any growth crisis up to senility. (Schizophrenia is not the least an exclusively adolescent disorder). The other face of such growth, or adolescent like crises, is the active phase of a psychotic process (particularly schizophrenia). It has been suggested that both maturation and disorganizing crises share a common start, surely with opposite outcomes (Rakhawy, 1979). In Feinberg's terms if the result of such early common phase is adequate neuronal elimination and optimum reorganization, growth is enhanced and performance improved. On the contrary, if the result is overelimination or chaotic malorganization, a defect state or a chronic decompensated psychotic syndrome sets in.

To prove such hypotheses through contemporary investigations is beyond imagination. Nevertheless, we have to rely upon analogous models and behavioural parallelism for now.

Such approach is apt to alter the whole therapeutic situation where simple disappearance of overt symptoms becomes least significant in comparison with other outcome measures of humanistic functioning as a whole. Thus emphasis is to be put more and more on active early therapeutic interference, optimum adjustment of the dose and duration of treatment with chemically blocking agents (the so-

-called antipsychotic drugs) in unison with the other active measures of therapeutic intervention, particularly in a milieu or rehabilitation setting. Re-establishing valid central ideas and meaningful object relations may prove to be most important in the establishment of proper elimination and optimum neuronal reorganization as an outcome of the active phase. Once established malorganization sets in, therapeutic variables become less significant in influencing structural organization. This corresponds to the latency-stability transformation between early childhood and adolescence. However, on waiting for the next unfolding whether occurring naturally or enhanced therapeutically one could prepare for better reorganization in due time (Also corresponding to adolescence, or other growth crises, is preparatory upbringing in normal life). Under these terms, psychiatric therapy can transcend the reductionistic attitude emphasizing chemical correction of hyper - or hyponeurohormone. As well, therapeutic responsibility for the quality of the outcome of active pathological crises may be augmented several times.

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Mood Changes in Egyptian Senile Depressives

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ABSTRACT

A sample of 31 senile depressed patients aged 65 years or more was selected. All were subjected to careful physical and psychological examinations including provocation of various forms of emotion, and an inquiry about their predominant emotions 6 months prior to asking psychiatric help. A control group comprised 12 persons of nearly the same socio-biological characters was selected.

The clinical picture of our senile depressives differs from the known picture of "Depression" in the absence of a depressed mood and the over-representation of hypochondriacal symptoms. Other manifestations are : tendency to cry, restlessness, fear, desire for loneliness and marked sensitivity. The emotional state prior to consultation was coloured by a lot of symptoms. These were : sense of hopelessness, self reproach, pessimism, frequent dejected mood and a sense of worthlessness.

Emotional deprivation is postulated as an essential causative factor, while in 19.4% no evident cause was observed.

Difficulties arose in a trial to search for the hereditary load in senile depressives, but it seems that this factor is not so important in predisposition, and that the