

## Congenital aberrations of functions and structure

Aberrations in the prenatal development of a living being may relate to the structure (form, substrate), the function (enzymes, metabolism, movement) or to both. Innate abnormalities are charged with the myth of the irrevocable, fatal. This mostly because the underlying elementary processes take place on a level partly below the threshold of our recognition but certainly beyond our imaginative power.

In fact, it is really paradoxical that most of the non-hereditary «chromosome abnormalities» show morphological aberrations on the hereditary substrates, the chromosomes, whereas on the other hand no morphological equivalent can be found on the hereditary substance in the recessive or dominant «hereditary diseases».

The two therapeutic ways used so far of *substituting lacking substances* (e.g. insulin substitution in diabetes) or the *elimination of non-processable metabolites* (e.g. reduction of phenylalanin in phenylketonuria) are symptomatic measures. Experimental biology has used the sinister term «gene manipulation» to point to a causal influence on structural and functional aberrations of

the genes. A serious question-mark, however, stands before the consequences in medicine.

The cell therapy proved the possibility of influencing innate abnormalities practically already when theory flatly denied such possibilities. The appearance of clinical changes is often called into question if there is no theoretical or logical explanation of what has become visible. Then reference is made to the «present state of science», the relativity and insufficiency of which is disclosed by every following new recognition.

This situation must be borne in mind when «cell therapy for chromosome aberrations» is the subject of a treatise. The «present state of science» relies on the idea that a chromosome abnormality is «*the cause*» of a mosaic of clinical symptoms. In fact, a morphological ascertainment on chromosomes is not more than an abnormality of the form in other dimensions i. e. those of the sub-cellular structures. The functional disharmony brought into a phylogenetic and ontogenetic harmony by such an abnormal form uses to be much more important than the aberration of the form proper.