

170 biologists of various countries join to seek the genetic bases of the autism

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Never an initiative of such a width had not been launched to identify the genetic causes of a psychiatric affection. Joined together with the centre of the international consortium Autism Genome Project, more than 170 biologists working in 50 institutions announced, Monday July 19, that they were going to put in commun run the whole of the biological samples taken on people suffering from this syndrome and of the members from their family. The genome of the cells contained in these taking away will be the subject, in the next months, of a centralized work of sequencing starting from a high-speed technique: the first results are announced for the beginning of 2005.

Rather than of autism - pathology discovered more than one half-century ago - it would be advisable to speak about autistic syndromes so much the forms of this disease are varied. In all the cases, it acts of a whole of symptoms which, appearing very early in the child, quickly cause to prohibit any normal social relation. The child seems walled in loneliness, the majority of the attempts at exchanges with him being dedicated to the failure.

Whereas the prevalence of this affection and the related disorders was estimated in 1990 at 1 case out of 10 000, of recent American studies let think that more than 1 child out of 160 would be touched.

In spite of very many work, of a considerable literature and innumerable debates, the autistic syndromes remain with many regards mysterious and often inaccessible to any therapeutic project. This situation was complicated by the combat opposing the psychiatrists organicists and holding them of the various psychoanalytical currents which, applicant that this disorder originated in essential the relationship between the child and his medium, often exacerbated the anguish of the parents.

It is only at the beginning of years 1980 that one started to get along on a clear definition and to highlight the importance of the disorders of acquisition of the language and early deficits of communication. Progress of the molecular genetics provided then new tracks but without bringing final solution.

METHOD OF SEQUENCING

It is to try to raise the mystery which continues to surround the autistic syndromes that is launched this international company. The 6 000 biological samples come from 1 500 families in whom at least two children suffer from a form of autism. A single material, ever joined together up to now. The persons in charge for Autism Genome Project bet on the new method of sequencing developed by the Californian company Affymetrix, used for the first time on such a scale in the investigation into the causes of a disease.

"This technique, which associates biotechnologies and computerization will allow an incredibly fast reading of the structure of the genetic changes present in the patients and their parents", explains Doctor Catalina Betancur (unit of neurogenetic of Inserm) which takes part in this project. The results will be then transmitted to Translational Genomics Research Institute, an American organization with nonlucrative goal specialized in the transformation of the genetic data into diagnostic tools.

"We hope ardently that this project can quickly supplement the few open tracks these last years, which related to in particular chromosomes 7 and 2, Doctor Betancur entrusts. It is highly probable that the genetic changes implied in the autistic syndromes are very numerous, but we have finally today the means which will enable us to include/understand."

Jean-Yves Nau

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