Delirium: Historical Aspects.

Delirium is a unique mental disorder. Historically it is probably the first mental syndrome that was ever accurately described. Several of its etiological factors were even known from the beginning of its diagnosis, for instance fever, intoxication, head trauma. It was also known that this disease might either cure on its own by itself - often in a few hours or days - or kill the patient. As a mental disorder, delirium is exceptional in that its manifestations are almost independent of cultural influences and also in that it can be unambiguously diagnosed in a few minutes at the bedside.

More than three centuries before Christ, Hippocrates described the symptoms of delirium as phrenitis which mainly was associated with febrile diseases. In the first two centuries Celsus and Aretaeus described delirium as an acute syndrome that sometimes might be followed by chronic dementia. They pointed out that delirium was usually associated with fever and might manifest itself also as lethargy and reduced awareness.

The term delirium derives from the Latin lira which means furrow. Delirare means getting out of the structured furrow, of one's normal senses. In today's conversational English the word delirious is sometimes used to mean outrageous, as in "deliriously happy."

Galen, in the first century, wrote that delirium was a disorder occurring in consensus or sympathy with various

diseased organs, for instance with pneumonia. This was an important insight because it directed the therapeutic focus - as is still the case today - to diseased organs other than the brain. Soranus, in the second century, clearly described the two forms of delirium: the agitated and the hypoactive. Although the terms delirium and dementia were sometimes inconsistently used, they survived almost 2000 years of history.

In 1596 the Englishman Barraugh not only gave an excellent clinical description of delirium, but also suggested therapeutic measures that were close to the modern management of delirium: a lighted room; a soft, gentle voice when speaking to the patient; a "stupefactive medicine" to deal with the stubborn insomnia of a delirious patient.

In the 17th century Morton explained that delirium was due to fever and made the interesting phenomenological statement that delirium represented a waking dream. This notion - which may actually be more than fantasy - was further elaborated in Quincey's Lexicon in 1757 which claimed: "A delirium is therefore the dream of waking persons wherein ideas are excited without order or coherence and the animal spirits (instincts, in today's language) are driven into irregular fluctuations."

Allow me to digress now for a few minutes into the history of an important era in science, an era that, in fact, delayed the emergence of psychiatry as a legitimate branch of medicine.

It was the era of the Age of Reason and Enlightenment when great scientists like Galileo, Newton and Harvey had established objective evidence that seemed to demonstrate that the universe, including living beings, functioned like mechanical clockwork. There was no need for psychic forces, a soul or even a mind with its own dynamics. Although clinicians made their own observations and could not do otherwise but speak of mental diseases, the academic view was that if there was a psyche or soul, for which there was no evidence or need, then this psyche - being immaterial - obviously could not be ailing from material illness. Thus, psychological disorder was a contradiction in terms, an oxymoron. There would be no psychiatry, even if medicine had existed for centuries.

Clinicians, in the absence of any scientific method of making diagnoses, asked such questions as whether a different diagnosis would have to be made for every individual's mental symptoms and whether, every time the symptoms, for instance the delusions, changed, the diagnosis would have to be changed too.

Only in the 19th century was the term psychiatry created by the German physician Reil. The Frenchman Pinel not only broke the chains of imprisoned mental patients at the Bicêtre in Paris during the French Revolution, but also threw off his own intellectual shackles and condemned the slavery of theoretical notions of the last 200 years. He did see mental diseases, called a spade a spade and wrote

the first systematic textbook of mental diseases. Then, in the early 1800s came an experimental and a conceptual breakthrough, Baile, in France, found definite lesions in autopsied brains of patients who had manifested mental symptoms due to syphilitic general paresis. In Germany the influential physician Griesinger now declared, in the mid 19th century, that there were really no psychiatric diseases at all, only brain diseases.

A passionate controversy persisted through the remainder of the last century between the "somatikers" and the "psychikers". Conceptual peace, or at least a long truce, between the two feuding parties was created by Kraepelin when he introduced, at the end of the 19th century, the two great, endogenous or functional psychoses - dementia praecox and manic-depressive psychosis.

I think that it was certainly more than a coincidence that Kraepelin drew his sharp line between functional and organic psychoses at the same time that his contemporary Freud conceived of a solid groundwork for psychodynamics. With psychoanalysis, the functional in psychiatry now had a systematic basis.

In the first decade of our century the psychiatrist Bonhoeffer, in Germany, introduced the term exogenous psychosis. By this he referred to a class of mental disorders which were caused by diseased organs or bodily conditions outside the brain. These mental disorders were not specific for the pathological organs or conditions that were causally

involved in their appearance but manifested themselves by five different syndromes. Today we have retained only two of the five - delirium and hallucinosis. Unlike Bonhoeffer, we also know that certain conditions within the brain may produce these "exogenous" manifestations. The important thing was that Bonhoeffer, like Galen almost 2000 years earlier, drew attention again to other organs beside the brain and thus redirected etiological and clinical focus in a group of psychiatric symptoms.

Two brief examples of exogenous psychoses: when I was about 7 years old I had a febrile disease and scared my parents with an agitated delirium during which I was afraid of snakes and did not recognize my parents. I still have complete amnesia for this delirium.

The famous psychiatrist Eugene Bleuler, at an advanced age, was dying and during his last hours described quite lucidly hallucinations he experienced to his psychiatrist son Manfred Bleuler. He suffered from hallucinosis, the other quite common manifestation of exogenous psychoses to which the young and the old are particularly vulnerable.

For 30 or 40 years after Kraepelin, psychiatric diagnosis was content with the distinction between: first, the Endogenous, Functional Psychoses with specific symptoms but of unknown etiology; second, the Organic Brain Syndrome with known intracerebral causes and typical, but not specific manifestations; and third, the exogenous psychoses of organic, toxic, metabolic, ischemic, withdrawal, but not

necessarily cerebral, etiology with nonspecific symptoms similar to those of the organic psychoses.

For some years delirium tremens, due to alcohol withdrawal, was considered to be the most typical form of delirium. However, the characteristic agitation of delirium tremens is frequently absent, for instance in the quiet delirium of the surgical or the aged patients, and this difference should not interfere with the recognition of these important other types of delirium.

It should be noted that Kraepelin, in his description of the functional psychoses, had not ruled out organic factors. However, in North America, from the 1930s until the 1950s, academic psychiatry, under the overbearing influence of psychoanalysis, put up another conceptual roadblock and ruled out all organic factors for the functional psychoses, much as the brain-disease dogma of last century's second half wanted to rule out all functional factors or as the Age of Enlightenment would not admit a psyche into its clockwork universe. The advent of antipsychotic drugs broke through the psychoanalytic dogma - because, if chemicals produced such dramatic, therapeutic effects in functional psychoses, there must be an organic substrate to them.

Today, psychiatry's general model is the biopsychosocial and its reigning diagnostic perspective is the American DSM-IV. The team that worked on the now internationally accepted psychiatric diagnoses of this (diagnostic-statistical) manual decided to do away

altogether with the contentious distinction between organic and functional disorders. The time-honored diagnosis Organic Brain Syndrome no longer exists in DSM-IV. Whether we like it or not, it has been replaced by the category Delirium, Dementia, and Amnestic and Other Cognitive Disorders. The exogenous mental disorders are now categorized as Mental Disorders Due to a General Medical Condition, for instance: Psychotic Disorder Due to a Malignant Lung Neoplasm. Substance abuse disorders constitute a separate category.

In conclusion, let us return briefly to the history of the delirium concept. Hippocrates and Celsus, more than 2000 years ago, described delirium as an acute mental disorder associated with febrile diseases. Aretaeus pointed out that intoxication with alcohol or poisonous plants could also cause delirium. Galen, toward the end of the second century, had realized that delirium may be agitated or hypoactive, but was always associated with severe insomnia. In the 16th and 17th century many clinical descriptions of delirium mentioned impaired reasoning and memory, hallucinations and delusions. In the 19th century, Delasiauve in France developed the concept of "mental confusion." However, this concept was applied ambiguously to organic and functional mental disorders. Toward the end of the last century "clouding of consciousness" replaced the term confusion in Germany and Bonhoeffer made clouding of consciousness the core condition of his exogenous psychoses. But

consciousness is itself a concept that is hard to define and clouding of consciousness might better be replaced by reduced level of awareness which can be more readily defined operationally. In 1959, Engel and Romano published one of the latest comprehensive studies of delirium and described the close association of the clinical symptoms of delirium with the slowing of the electroencephalogram.

The great psychopathologist and phenomenologist Karl Jaspers referred to delirium as a disturbance of experiencing psychic life as a "momentary whole." (That would mean that in the delirious patient's experience awareness of his environment and understanding of his self in relation to others is severely deranged.)

Finally, the recent (last fall) edition of DSM-IV defines delirium as: "A. Disturbance of consciousness (i.e. reduced clarity of awareness of the environment) with reduced ability to focus, sustain or shift attention.

B. A change in cognition .... or the development of a perceptual disturbance....

C. The disturbance develops over a short period of time ... and tends to fluctuate during the course of the day.

D. There is evidence .... that the disturbance is caused by the direct physiological consequences of a general medical condition."

And that historically well established definition might not change essentially over the next millennium.