## Apallic syndrome/vegetative state, clinical aspects in diagnosis and treatment, special care of this severest neurological condition

F. Gerstenbrand, B. Hess, S. Huber, W. Struhal Vienna, Innsbruck, Linz, Austria

pallic Syndrome (AS) as a specific entity was created by Kretschmer 1940. AS as a functional and transient state was described in details by Gerstenbrand 1967. An English version, the Persistent Vegetative State (PVS), was introduced by Jennet and Plum 1972, using the special term "A syndrome in search of a name". In 2002 Jennet revised the terminology to "Vegetative State (VS), Continuing Vegetative State (CVS) and Permanent Vegetative State (PVS)". A detailed description of the full stage, the accept of a remission course and a useful programme for treatment and neuro-rehabilitation as well as for medical care in a severe defect stage were not declared. The more responsible continental European Neurology is calling this severest disease as "Apallic Syndrome". An AS can have three different causes: 1) severe acute brain injury (traumatic, hypoxic, encephalitic, etc.), all with the possibilities of a remission, 2) progredient, diffuse brain processes (CJD, M. Alzheimer, etc.) as a final state, 3) intoxication, acute – with possible remission, chronic – partly with remission.

An AS after severe acute brain damage shows a typical course with an initial phase (acute midbrain or bulbar brain syndrome), a transitory stage, the full stage and the remission stage with 8 phases. In the full stage the apallic patient has lost all higher and highest brain functions, reduced to the meso-diencephalic level, comparable with a new-born child and fully depended to the surrounding. The most typical symptom is the coma vigile with a fatigue influenced sleep—wake rhythm. No voluntary movements can be observed, different primitive motor patterns (oral, grasping reflexes, etc.) are existing. Body posture is like in the new-born state but with increased muscle tonus, hyperreflexia and pyramidal signs. There is a dysbalance of the vegetative system. 80% of apallic patients after brain trauma, encephalitis and intoxication, are showing a remission stage, 30% of this group can be re-socialized. Only 65% with a hypoxic AS are developing a remission stage, but mostly with a severe defect.

The remission course of an AS shows eight typical phases, starting with optic fixation of objects. The Klüver-Bucy-phase (phases 3-5) with typical primitive motor patterns (grasping objects, trying to eat them), combined with hypersexuality is remarkable. The defect stage can show various and different intensive neurological deficits.

In patients with a progressive brain damage (Alzheimer disease, etc.) a contrary course can be observed, passing same phases like the remission stage. In the full stage a patient of this origin is in a final state without any possibility of an acting treatment. These patients have to be supplied in a special nursing centre.

All apallic patients after an acute brain lesion need a special treatment program beginning in the initial state. The neuro-rehabilitation has to be carried out in a specialized centre. Apallic patients with an untreatable defect state must be transferred in a special nursing care centre with the possibility of a continuing nursing care.

International Danube Symposium
for Neurological Sciences and Continuing Education
in collaboration with
Lublin Branch of Polish Neurological Society
Department of Neurology
Medical University of Lublin

## Progress in Multiple Sclerosis, Epilepsy, Headache and Vertigo Teaching Course

Stwardnienie rozsiane, padaczka, bóle i zawroty głowy under honorable patronage Andrzej Książek Rector of the Medical University of Lublin

> April 7-9, 2008 Kazimierz Dolny, Poland Program/Final Programme www.danube2008.skolamed.pl

## Progress in Multiple Sclerosis, Epilepsy, Headache and Vertigo Teaching Course

Stwardnienie rozsiane, padaczka, bóle i zawroty głowy

© Copyright by Agencja Promocyjno-Wydawnicza PMP, Warszawa 2008

Wszelkie prawa zastrzeżone

sanofi aventis

Materiał wydany dzięki pomocy firmy Sanofi-Aventis

Agencja Promocyjno-Wydawnicza PMP

ul Wita Stwosza 49, 02-661 Warszawa

tel.: 022 899 29 55, 022 899 29 89 (90), fax: 022 853 23 20

e-mail: pmp@pmp.med.pl

Redakcja: Ilona Szumicka

Projekt okładki: Diana Pierścińska Skład i łamanie: Anna Zamorska

Druk: ArtDruk, Zakład Poligraficzny Kobylka, www.artdruk.com, tel. 604 979 357