The latter factors cause a reduction of cerebral blood perfusion. The psychomotor adaption syndrome requires multidisciplinary management including medical, physiotherapeutic and psychological approaches. Early specific rehabilitation is determining factors for prognosis. The rehabilitation program must be global and linked with the objectives of life and the residual motivation of the patient. Techniques are numerous and adapted to every person. The priority objective is learning of basic motor patterns (rolling in the bed, sit to stand and sit to stand to sit). The correction of the retropropulsion is used always during the rehabilitation in the learning of basic acts, in the reeducation of balance and gait. The team has to stimulate regularly these patients according to two ways: on the psychic plan by fighting against desaffection and slowing down; on the motor plan by mobilization according to identical motor patterns that are repeated throughout the day.

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CO23-003-e
Sarcopenia
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Sarcopenia is defined by loss of muscular mass, strength and quality that occurs in elderly. It has become an important area of research because of its frequency and its responsibility for a significant part of the mobility disability in older people. Understanding and treating sarcopenia could probably have a dramatic impact on the disability process.

A definitive consensual clinical method to assess sarcopenia is still needed in everyday clinical practice and clinical research. The different characteristics that define sarcopenia are usually studied separately. The loss of muscular mass and muscle strength is mainly caused by low physical activity, age-related changes in steroids hormones and inflammatory processes. Treatment relies on a multidimensional approach. Preventing loss of muscular mass and preserving muscle strength is relevant if it prevents decline in physical performance and mobility disability. Identifying target elderly populations for specific treatment in clinical trial is an important issue. To date, strength training is the only efficient approach to treat and prevent sarcopenia. So far, no pharmacological treatment has proven definitive evidence to treat or prevent sarcopenia.

On-going and future pharmacological clinical trials may radically change our understanding and treating sarcopenia.

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Spatial-temporal gait analysis in Normal pressure hydrocephalus and Parkinson’s disease
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Normal pressure hydrocephalus (NPH) and Parkinson’s disease (PD) are classically considered difficult to distinguish from each other clinically.

Methods.– Three age-matched groups participated in this study: subjects with idiopathic NPH (n = 12, 68 ± 12 years), subjects with early to moderate PD (n = 25, 69 ± 8 years, Hoehn & Yahr 2–3, OFF) and control subjects (CTL, n = 14, 66 ± 12 years). Each subject walked 8 m barefoot on a baropodometric carpet (GaitRite™), at free and fast speed. We analyzed speed, cadence, step length and width, a cadence index (CDI) and step length index (SLI) that represent the relative contribution of each parameter to speed increase, as follows:

CDI = \frac{\log(\text{CTL speed}/\text{NPH speed})}{\log(\text{CTL speed}/\text{PD speed})} \times 100

SLI = \frac{\log(\text{CTL speed}/\text{NPH speed})}{\log(\text{CTL speed}/\text{PD speed})} \times 100

Results.– Free speed
The NPH group was slower than normal (CTL, 1.07 ± 0.21 m/s, NPH, 0.73 ± 0.28 m/s, P = 0.022) with increased step width (CTL, 0.10 ± 0.04 m, NPH, 0.13 ± 0.05 m, P = 0.049). In the PD group, cadence was abnormally

CO23-002-e
Positioning backward hypertonic disequilibrium in geriatrics
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Backward hypertonic disequilibrium combines a slide-forward by retroversion of the pelvis and loss of lumbar lordosis, inducing a growing phenomenon in attempts to reposition (enhancements).

To stabilize the slip before, two factors appear important: the bevel cranial to elevate the femoral segments and a basin ischio-sacral segment to stabilize the pelvic skin without increasing pressure on the ischial pressure sheet. A pelvic thrust, with curved posterior part, can be adjoined to limit the phenomenon, stabilize the pelvis in the sagittal plane and avoid excess pressure at the pubic symphysis.

Further reading

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