

## **Botulinum toxin in post stroke spasticity. Treatment in chronic phase**

### **P. Manthos**

*Rehabilitation day clinic "Iatriki Askisi", MD, Greece*

Spasticity in the chronic stage has characteristics which specialists have to consider before perform botulinum toxin therapy. In this stage patients have adopted a consolidated motor and postural pattern due to maladaptive neuroplasticity. Owing to this fact the dosage will be much higher than in acute or subacute stage especially to the key muscles, responsible for the abnormal pattern. The dose performed to this muscle is estimated, not only by the Ashworth grade, but as well as its participation to the motor pattern. It is well known already that the grade of spasticity in the chronic stage is much higher as well as much more muscle groups are involved than in the acute and subacute stage. This fact is also one of the main reasons of using higher doses of botulinum toxin type A in this particular stage. Another component we have to consider in this stage is the possible changes in muscle composition established, local biomechanical changes, contractures, and fibrosis. Even in this case botulinum toxin therapy before as well as after the intervention optimizes the result. Especially in this stage we have to carefully set the goals of this particular treatment. The goals in this particular stage may be the motor facilitation, melioration of the motor and postural pattern, improvement in activities of daily living, facilitation of the patient or the care givers in hygiene, relief from the pain, prevention from complications due to spasticity, fitting of splints.