

Course for occupational- and physiotherapists
Instituto Politécnico de Beja - Escola Superior de Saúde Portugal
7-8-9th. of March 2019
Contact: Professor Antonio Duarte ajaduarte@gmail.com

PANat: PRO-Active approach to Neurorehabilitation,
integrating Urias[®] Johnstone* air splints and other therapy tools.
PANat is a further development of the Johnstone concept.

Course tutor: Accredited PANat teacher, Occupational therapist specialised in brain damage Birgitte Gammeltoft, Denmark

Purpose of the course:

Studies have shown that adding repetitive and early stimulation of the upper hemiplegic limb of the stroke patient, with pronounced muscle weakness or a severely paralysed arm using the air splint, have an effective long lasting effect on motor function.

Interventions encouraging specific and intensive training with the hemiplegic limbs are made possible by adapting the task and the environment using Urias[®] Johnstone air splints and other therapy tools (e.g. rocking chairs, balance sticks).

This adapted situation becomes a learning environment, to motivate patients to train selectively control of movements. This can contribute to a better performance of the task.

The PRO-Active approach is particularly suited to treat stroke patients with severe sensory-motor impairments. Incorporating the principles of PANat using interventions with the hemiplegic limb that are repetitive, intensive and selective in all phases of stroke rehabilitation, is one method to enhance the mechanism of Neuroplasticity and promote efficient goal-directed motor training. Emphasis is placed on giving the individual an opportunity for self-directed practice with the hemiplegic limbs both during and outside supervised therapy sessions and in the home-setting.

Further reading of the theoretical framework: www.panat.info

Practical sessions to learn how to:

- Reinforce weak muscle groups with stabilisation of joints while strength training.
- Understanding motor learning and neuroplasticity.
- Strengthen weak muscles to regain alignment. The use of Urias[®] Johnstone air splints and other low- tech therapy tools give patients the opportunity to be active in an ongoing rehabilitation process in their environment.
- Lengthening muscles to prevent muscle shortness and stiffness under active training.
- Prevent and treat problems with edema.
- Stimulate sensation to regain better perception of the body.

Programme:
7th March 2019

9.00-10.00	Welcome and introduction. The history of Johnstone. Where did it start and which way are we going now in 2018.
10.00-10.15	Break
10.15-12.00	Theoretical framework – the science based theory background
12.00-12.45	Lunch
12.45-13.30	Practical workshop with Urias [®] Johnstone air splints. Long arm and foot splint – Focus on hypotone patients
13.30-14.15	General handling of the stroke patient
14.15-14.30	Break
14.30-16.00	Positioning and transfers to facilitate recovery

8th March

9.00-10.00	Specific shoulder handling – typical problems and what to do
10.00-10.15	Break
10.15-10.45	Practical work with Urias [®] Johnstone air splints short arm - prone sitting or lying
10.45-11.45	Patient assessment and treatment with course tutor
11.45-12.00	Questions and follow up on treatment
12.00-12.45	Lunch
12.45-13.30	Presentation of the PANat tools Hand and wrist splint used for treating oedema and stiffness
13.30-14.15	Hand and wrist – practical work – tools for self-training also with Laptool
14.15-14.30	Break
14.30-16.00	Fingersplint – practical work. Focusing on hypertone

9th March

9.00-10.00	Bilateral training to stimulate brainfunction
10.00-10.15	Break
10.15-11.00	Typically problems in hip, knee and ankle - realignment Practical work realignment and working with the Urias [®] Johnstone air splints Leg gaiter
11.00-12.00	Practical work foot splints for walking
12.00-12.45	Lunch
12.45-13.30	Evidence for use of Rocking chair - Intermittent pressure
13.30-14.15	Splints for MS patients
14.15-14.30	Break
14.30-15.45	Practical workshop combining arm and leg splints.
15.45-16.00	Final questions, evaluation and closing the course.