THERMAL SHOCK: AN INNOVATIVE PHYSIOTHERAPY METHOD

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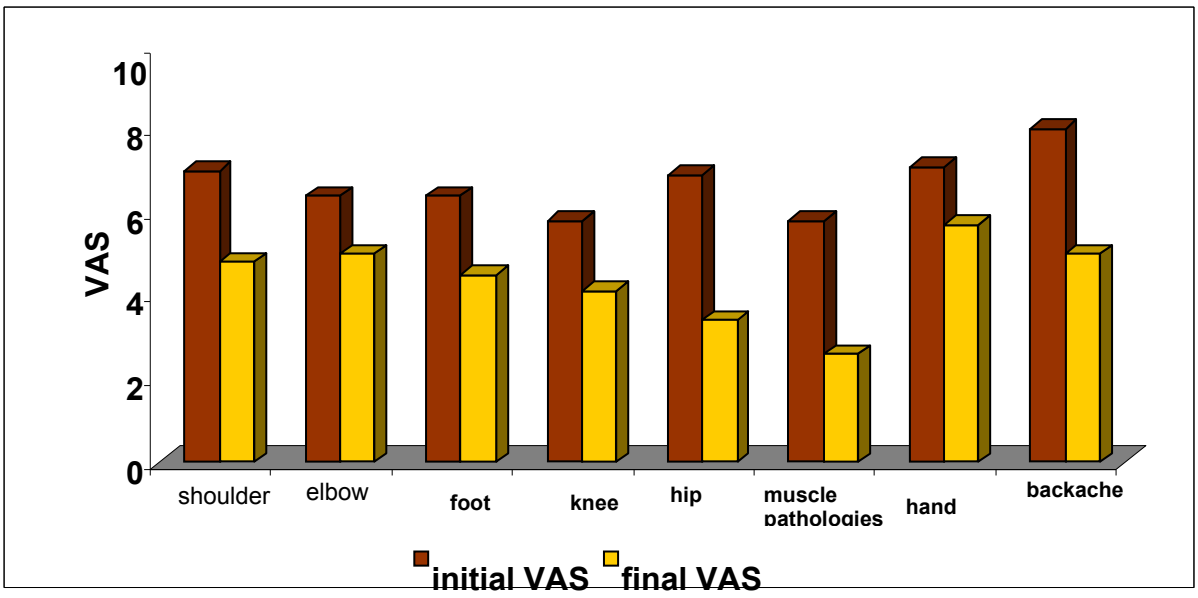
The application of thermal energy in its two forms, removal of heat (cryotherapy) or application of heat (hyperthermia), is a common rehabilitation intervention [1, 2]. Nowadays technology allows to apply energy in safety conditions and with a proven biologic efficacy [3].
The system employed is SMARTERAPIA ® which matches both forms of thermal energy application. During session a controlled dynamic thermal shock is caused, giving benefits to tissues. The new system consistently includes 5 steps in the rehabilitation project:

. Step 1: resolution of pain, swelling and inflammation
. Step 2: recovery of range of motion
. Step 3: recovery of muscle strength
. Step 4: recovery of motor functions and coordination
. Step 5: recovery of athletic movement

This study aims at investigating the effect of the therapy on patient's pain, fully aware that the heat application or removal is a valid aid to the rehabilitation intervention.
109 patients in total, affected by different muscle-skeleton pathologies, underwent treatment. All patients were treated in 10 sessions, one session per day.
At the beginning and at the end of treatment, all patients were given a VAS (visu analogic scale), in order to value the short-term effect on the pain suffered.
Graph 1 shows the average results obtained by treated patients, with relevant VAS values, divided into different areas.



Most patients were affected by chronic pain. As a consequence even small initial and final VAS variations have to be read with enthusiasm. The results point out the method efficacy in orthopaedic area as a support in the rehabilitation intervention. As a result the thermal shock fits within the rehabilitation projects giving the patient all opportunities to reach the highest functional recovery.

Bibliography

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