

Extract of the paper “Technique to evaluate the thermoregulatory capacity before thermal stress. Application case of thermographic images to blood flow monitoring”

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Abstract

In order to improve the acquisition of skills in nursing and physiotherapy, a new learning methodology is presented. To this end, a laboratory practice based on the combination of thermographic technologies and clinical practice is shown. The thermographic images are used for the evaluation of the thermoregulatory system of the hands, with particular emphasis on Raynaud's syndrome or phenomenon. In Raynaud's syndrome, alterations in surface temperature occur in peripheral regions such as the hands. In this methodological practice, thermographic information is evaluated to observe the physiological response to thermal stress, information that can be handled by students via e-learning. It is a protocol model of thermal stress by immersing hands in cold water. The present work is related to the application of infrared technology that can be used not only for the acquisition of practical skills, but also for the evaluation of competencies in the area of health sciences. In this practical project the student is able to apply complex competences in the field that will be developed throughout their career in both clinical and / or research.

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Keywords

Educational innovation; ICT; E-Learning; Engineering; Thermography; Circulatory physiology

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