Effectiveness of a noninvasive Digital Infrared Thermal Imaging in the diagnosis of torture: case report.

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Background: Digital Infrared Thermal Imaging is a new diagnostic method that is a non-invasive, non-contact system of recording body temperature by measuring infrared radiation emitted by the body surface. This method has been called as non-contact thermography, thermographic imaging or thermology.
Digital infrared thermographic imaging has been used widely for various inflammatory diseases, circulatory diseases, skin diseases, muscle- skeletal diseases and cancers. An asymmetrical temperature distribution pattern is usually a strong indicator of abnormality. In many cases of ligament injury, fibromyalgia, myositis obviously the temperature of the damaged area increases due to local inflammation.
Methodology: The purpose of the this study is to discuss applicability of Digital Infrared Thermal Imaging for torture survivors with muscular injuries in account of a case presented who suffered from numerous severe torture methods such as beating, falanga, suspension, positional torture, exposure to cold, electric shock in 1993 and 1996 for many days.
A 55 years old male with chronic pain complaint on his upper and lower limbs, back and neck pain was referred for Digital Infrared Thermal Imaging in Izmir branch, in March 2015. His torture history, complaints, data of onset, present illness, physical examination and infrared thermal image was evaluated.
Results: Thermal activities were detected in his face, shoulders, thoracic back, lumbar back, sacral region, upper and lower extremities by Digital Infrared Thermal Imaging, and these activities are corresponding with myositis and the fibromyalgia.
These results support Digital Infrared Thermal Imaging as a diagnostic instrument for torture assessment as well as an adequate choice of treatment method.

Keywords; Torture, Digital Infrared Thermal Imaging, documenting torture, diagnostic method, chronic pain.

Conflicts of interest: The authors declare that they have no conflict of interest

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