Medical Thermography: Past, Present, and Future

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Update on Use of IR Thermography in Various Medical Fields

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Abstract

The object of this study is to review up-to-dated developments, scientific proofs, and current applications of infrared thermography in various medical fields along with personal insight on its future direction. Despite many inherent limitations and disadvantages related to infrared thermography in medical fields, author believe that it can be a great tool in various clinical settings, namely acute/chronic pain disorders, musculoskeletal disorders, metabolic and endocrine disorders, when strict protocol of its usage is applied in selected patients. This is especially true because it has several invaluable potential advantage but also its technologies have been improving and many ancillary appealing features, along with its core development, are under intense investigations. Recent expansion of use in the range of infrared spectrum, especially near infrared, adds to more promising feature for the diagnosis and treatment of certain diseases or clinical condition including trauma related events. However, continuous efforts should be made for many good designed, controlled, with large population-based, studies with currently available techniques will be needed in the future to be considered a scientifically valid, compatible diagnostic tool that can provide unique and valuable information compared to other diagnostic modalities.

KEY WORDS: Medical, Infrared, Thermography, Diagnosis