Theoretical basis for a new approach of studying Emery-Dreifuss muscular dystrophy by means of thermography.

**Abstract**

**INTRODUCTION:** Emery-Dreifuss muscular dystrophy (EDMD) is a clinical condition characterized by neuro-skeletal and cardiac impairments. By means of thermography, an image acquisition technique that allows the recording of the heat emitted by objects or bodies, new insight can be obtained insights about the evaluation and follow-up of this disease. Actually, musculoskeletal disorders are a major cause of counseling and access to rehabilitation services and are some of the most important problems that affect the quality of life of many people. There are urgent both clinical and research needs for the assessment and follow-up of patients with Emery-Dreifuss muscular dystrophy and the thermography is a rapid, non-invasive, easy to use and objective technique that analyzes the temperature of the examined tissue.

**HYPOTHESIS:** The main aim is to offer a new possible hypothesis of validating the thermography techniques that support the evaluation and clinical follow-up of the Emery-Dreifuss dystrophy. To carry out this work we rely on the evidence of the existing bibliography. To perform this work and to evaluate the current situation on this topic, a systematic review was carried and after the application of an automatic and manual filter, inclusion and exclusion criteria, a total of 0 articles was obtained. Unfortunately, there is a lack of articles that relate the use of thermography in the Emery-Dreifuss muscular dystrophy. Due to the absence of information, we have expanded the search to articles concerning the use of thermography in relation to alterations of the musculoskeletal system compatible with those of Emery-Dreifuss, genetic diseases related to the X chromosome and more generally muscular atrophy. Based on other studies and results carried out in diseases that show signs and symptoms similar to Emery-Dreifuss Muscular Dystrophy, we believe that a new line of translational research could be opened with novel findings and we think that thermography could be an optimal tool for the clinical monitoring of this pathology. We believe that it would be of a great importance to carry out an observational study, to lay the foundations for future works, that relate...
thermography to the Emery-Dreifuss muscular dystrophies.

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