The oncologic rehabilitation

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Abstract
In recent times the survival possibilities of cancer patients have increased because of an evolution in diagnostic and therapeutic techniques. Because of that modern medicine have to face new problems related to cancerous pathologies such as cancer outcomes, particularly pain, and recurrences possibilities. These new horizons go hand in hand with the necessity of an increase in consciousness about main risks factor for cancer development like smoke, obesity, malnutrition, poor physical activity, viral and bacterial pathologies, pollution and unprotected sexual activity.

Because of these reasons it is clear that there I the needing for a new approach to cancer patients, focused not only on the acute stage of the pathology but also on the survival, recurrent and terminal stages of the pathology.

Purpose
The aim of this analysis is to outline new concepts about rehabilitation in oncologic medicine, defining aspects like phases of cancer, risk factors, healing factors and new diagnostic and physiotherapy approaches.

Patients
The analysis is referred to the whole oncologic population so for patients going through the acute stage, so from the diagnosis of cancer to the first year of treatment, survival stage, so from the first to the fifth year of treatment and beyond and, recurrent and terminal stage of the pathology, focusing on aspects that can help every kind of patient to better fight their cancer.

Experimental Test
Evaluation systems in cancer rehabilitation must include not only the standard clinical analysis and evaluation of specific cancer markers, but also newer and more function-focused systems like quantic analysis of biological parameters, more accurate pain and fatigue analysis systems and specific structural evaluation like muscular trophism, strength and rheology.

Method
The new approach to cancer rehabilitation must rely first of all to a deep modification of the patient’s lifestyle. This means that the role of physical activity must be aggrandized, in accordance with evidences demonstrating its positive effects in the recovery of muscular trophism and tone during cancer induced cachexia. Also the use of scientific validated supplements like Branched Chain Amino Acids, Omega 3 Essential Fats, Carnitine and Trans-Resveratrol and its derived phenols. From a strict physiotherapeutic point of view a new approach must focus on techniques aimed to a global recovery of the functional human system like modern stretching techniques with new dedicated devices, systems for the recovery of the sensory-motor abilities of the patient, like specific microgravity proprioceptive devices, proprioceptive insoles, proprioceptive active systems of training and water rehabilitation, and strengthening devices, in particular passive vibration therapies for the recovery of functionality of the patient. More advanced systems can include new physical therapy devices like low frequencies electromagnetic field capable of inducing a modification of the body’s physiologic activity on a quantic level.

Results
Preliminary outcomes for such integrated rehabilitation protocols dedicated to different kind of cancer patients showed a greater recovery both during the acute and survival stage. Moreover there are preliminary evidence that these new rehabilitation approaches can have positive effects also on terminal stage patients, improving their mood a general wellness even in the presence of a certain lethal exitus. These results are probably due to the ability of these new rehabilitation techniques of reducing both central and peripheral pain and increasing the regeneration of tissues and their general functional recovery.

Consideration
The planning of a global therapeutic plan involves the establishment of a complex rehabilitative project associated with a physical activity program with interventions aimed to correct lifestyles and adopting an adequate diet, introducing suitable nutrients for a better recovery in the short and medium term and for a long-term survival of the Body Dynamics contexts of the patient with cancer and "cancer survivors".