Interest and feasibility of exercise and health counseling in patients undergoing allergenic hematopoietic cell transplantation


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Keywords: Allergic hematopoietic cell transplantation; Rehabilitation

Background.– Allergic hematopoietic stem cell transplantation (HSCT) is increasingly used in treatment of hematological diseases and malignancies, though is still associated with a high treatment-related morbidity and mortality. Patients experience toxicity related to the conditioning including intensive chemotherapy, infectious and immunological complications as GVHD. They report also short and long-term negative physiologic symptoms as decreased cardiovascular and respiratory capacity, muscle weakness, pain, loss of appetite and above all fatigue. Moreover, some psychological adverse reactions are frequently observed, as reduced emotional well-being, depression and anxiety.

Objectives.– This treatment-related burden can be debilitating and may limit reintegration into usual life activities. It has been also shown that decreased quality of life is linked to lower physical activity levels during HSCT and persists after HSCT.

Methods.– We have recently proposed to these patients a personalized rehabilitation program, including physical exercise and health counseling, at various stages after HSCT, performed at hospital. The program could be conducted one day per week to five days a week, according to medical status and environmental conditions.

Results and discussion.– We present here some preliminary results that put in light interest and feasibility of such programs, and lead to encourage early rehabilitative propositions, in order to optimize physical and psychological well-being of patients.

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Adapted physical activity intervention among adults with cancer undergoing hematopoietic stem cell transplantation (HSCT): A feasibility study

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Keywords: Adapted physical activity; Hematopoietic stem cell transplantation

Objectives.– The aims of this study were to obtain a moderate exercise intensity (i.e., 75% Hrmax) with dance and to decrease anxiety, depression, fatigue level among patients undergoing hematopoietic stem cell transplantation (HSCT).

Method.– Population of adults with cancer undergoing HSCT were included at University Hospital of Montpellier. The study was a pilot study with 2 arms (APA vs control). APA intervention is based on supervised dance sessions (3 sessions/week, 45 min) during 10 weeks. Adherence, drop-out, HR (objective and standardized) were tracked at each session. Fatigue (assessed with MFI), anxiety and depression (assessed with HADS) were measured pre- and post-intervention.

Results.– Among 15 adults solicited, 12 have been recruited (6 per group). Adherence rate was 90.6%. Findings showed a mean intensity of 68.6% HRmax. Significant decrease was found for fatigue score among adult participating to APA intervention. However, this result was no significant after control of baseline levels of MFI. Compared to control group, there were no changes in depression and anxiety.

Discussion.– This intervention appears feasible to patients with cancer undergoing HSCT. Larger trials to test the intervention have to be warranted.

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Neuroradiographic correlates of impending functional decline in patients with brain metastasis

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Keywords: Cancer; Brain metastasis; Physical function

Background.– Patients with cancer-related disability rarely receive rehabilitation services due to poor understanding of clinical characteristics that predict functional decline. This study examined associations between brain metastasis characteristics and functional decline.

Methods.– Physical functioning among a cohort of 313 patients with Stage IIB and IV lung cancer was assessed at one-month intervals with the Activity Measure for Post-acute Care Computer Adaptive Test (AM PAC CAT). Sixty-two patients developed brain metastases documented on 112 intracranial scans. Loca-