

SUPPORTIVE CARE

430MO Impact of Nada yoga music therapy on anxiety and quality of life in ovarian cancer patients: A randomized controlled trial

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Background: Nadayoga is a complementary therapy known for its potential to reduce anxiety. This study aimed to assess the effects of Nadayoga music on anxiety management and Quality of Life (QoL) in ovarian cancer patients undergoing chemotherapy.

Methods: In this randomized controlled trial, 58 ovarian cancer patients undergoing chemotherapy were recruited. Participants were randomly assigned to either the Nada yoga music group (Group A) or the Nada yoga music with Instruction group (Group B) using a simple randomization procedure. Instructions for Nada yoga music were recorded by the researcher and delivered to both groups through a custom Android application developed for this study. Follow-up assessments were conducted every three weeks, and anxiety levels were measured using the Hamilton Anxiety Rating Scale, while QoL was assessed using the EORTC QLQ-C30 Quality of Life Questionnaire. Baseline data was collected just before the first chemotherapy session, and post-data was collected after 12 weeks.

Results: Data from 49 participants were included in the analysis according to the protocol. Both groups were found to be homogenous with respect to age, weight, and clinical parameters. Significant differences were observed in anxiety scores between the two groups ($p = 0.026$). Furthermore, a notable improvement in global health status was noted in both groups ($p = 0.039$). However, no significant changes were observed in physical functioning ($p = 0.390$), role functioning ($p = 0.453$), emotional functioning ($p = 0.192$), cognitive functioning ($p = 0.190$), or social functioning ($p = 0.282$). Significant differences were observed in fatigue ($p = 0.039$), nausea/vomiting ($p = 0.009$), dyspnoea ($p = 0.011$), and financial difficulties ($p = 0.006$) between the two groups, favouring intervention arm.

Conclusions: In conclusion, the twelve-week Nadayoga music therapy intervention offers a cost-effective approach to reducing anxiety and improving the quality of life for ovarian cancer patients. This study highlights the potential of Nadayoga music therapy as a valuable addition to comprehensive cancer care, emphasizing its positive impact on emotional well-being and symptom management.

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431MO Cost-effective evaluation of homemade diet recipe in head and neck cancer patients during radiotherapy from low-middle-income group countries

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Background: Radiotherapy is an integral part of treatment in head and neck cancer patients. These patients are at a high-risk of malnutrition during and after the course of treatment. In low-middle-income group countries (LMICs), patients are mostly undernourished. They need cost-effective, easily available, and acceptable nutritional support. The study has looked at the effectiveness of homemade vs commercially available nutritional supplements.

Methods: Homemade diet recipes were designed using low-cost and locally available ingredients according to the taste of local people to fulfill the daily caloric requirement of $\approx 2,000$ kcal (30 kcal/kg for a 65 kg adult) with ≥ 90 gm of protein (1.5 gm/kg). Alongside, five commercial nutritional supplements were evaluated to meet the

above requirements. 50 consecutive patients of head and neck cancer on radiotherapy were included. Group A of 25 patients were given a homemade diet recipe and group B of 25 patients were given a commercially available nutritional supplement of their choice.

Results: The caloric content (380 ± 80.1 kcal/100 gm, 260–474 kcal) and protein contents ($32.6 \pm 10.9/100$ gm, 15–49 gm) in commercial supplements were variable. For providing 2,000 kcal with a minimum of 90 gm protein, the cost of commercial formulations ranged from INR 745–3,461/day ($1,700 \pm 946$). Comparatively, homemade recipes were estimated to cost just INR 135/day. For the 2000 kcal diet, the difference in nutrient contents of commercial vs homemade preparations were nonsignificant, while the cost was significantly lower with homemade recipes ($p=0.03$). Both the cohorts were well matched. Mean weight loss at the end of treatment in group A was 3 kgs (2.1–3.5) whereas that was 5.7kg(3.5–6.9) in group B($p=0.01$). 20%(n=5) patients required hospital admission for supportive care in group A and 36%(n=9) in group B. After 6 weeks of completion of treatment mean weight gain in group A was 4.6kg (3.9–5.5kg) whereas in group B was 2.4 kg(1.8–3kgs)($p=0.03$).

Conclusions: Homemade diet recipes are highly effective to fulfill the compromised nutritional needs during radiotherapy in head and neck cancer patients. It is acceptable, palatable, cheap and thereby especially suit patients from LMICs.

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432MO Barriers and facilitators of home-based exercise intervention participation in Indonesian breast cancer patients: A nested qualitative study using COM-B model

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Background: The benefits of home-based exercise for breast cancer (BC) are evident. However, little is known about its feasibility in Indonesia, with likely more challenging participation barriers compared to high-income countries (HIC). We aimed to assess intervention feasibility and understand patients' barriers and facilitators to enhance participation.

Methods: This is a nested qualitative approach to a study assessing the benefit of a 12-week home-based exercise intervention in BC patients, consisting of walking and resistance training. Descriptive statistics were used to assess feasibility. After 12 weeks, 25 patients were purposively sampled. Semi-structured interviews on barriers and facilitators were conducted in Dr. Sardjito General Hospital, Indonesia. All interviews were individual, face-to-face, lasting 25–40 minutes, audiotaped, and transcribed verbatim. A deductive thematic approach was used to analyse the data, and the themes generated were mapped onto the Capability, Opportunity, Motivation, and Behaviour (COM-B) model.

Results: From 48 eligible patients, 36 patients consented (recruitment rate 75%) and 32 patients completed 12-week intervention (retention rate 89%). Barriers that hampered participation were categorized into: physical capability (pain upon exercising, feeling ill), psychological capability (laziness), physical opportunity ('too busy', bad weather), and social opportunity (no companion, judgment in society). It was unusual or taboo for women to exercise alone in the neighborhood. Facilitators of intervention participation were: physical opportunity (goal-setting, exercise recommendations from oncologists), social opportunity (reassurance from regular contact with research team), automatic motivation (accountability), and reflective motivation (improved physical fitness and psychological well-being).

Conclusions: Our findings indicate that home-based intervention is feasible. Among identified factors that affect participation in Indonesian BC patients, judgment in

society is a unique social barrier and has not been observed in previous studies in HIC. Addressing barrier factors is needed to enhance participation.

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433MO Tofacitinib for the treatment of immune-related adverse events in cancer immunotherapy: A multi-center study

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Background: Treatment strategy against immune-related adverse events (irAEs) induced by immune checkpoint inhibitors (ICIs) frequently requires other immunosuppressive agents. Tofacitinib is a rapidly acting JAK-STAT inhibitor with proven efficacy in multiple autoimmune diseases. We aimed to evaluate the efficacy and safety of tofacitinib in the management of irAEs in cancer patients.

Methods: Cancer patients who received ICIs and treated with tofacitinib for the management of irAEs at 6 institutions were retrospectively included in this study. Demographic and clinical characteristics were obtained from electronic medical records. Longitudinal assessment of cardiac troponin T (cTnT) with clinical assessment was utilized to evaluate the benefit of tofacitinib treatment in patients with ICI myocarditis. Progression-free survival (PFS) and overall survival (OS) were also assessed.

Results: Fifty-three patients were included in this study. Median time from irAE onset to tofacitinib therapy was 17 (range, 2-186) days and median duration of tofacitinib treatment was 48.5 (range, 3-277) days. Enrolled patients were subdivided into 3 groups based on clinical severity and steroid responsiveness including 11 life-threatening cases, 30 steroid-resistant cases and 12 cases with steroid taper failure. Clinical remission rate in each group was 54.5%, 96.7%, and 100%, respectively ($p < 0.01$). Tofacitinib was well-tolerated with 4 patients (7.5%) developing infectious events. From the ICI initiation, the overall median PFS was 5.6 (95% CI, 4.0-14.1) months, and the median OS was 16.1 (95% CI, 7.7-NR) months.

Conclusions: Tofacitinib showed promising clinical efficacy in patients experiencing irAEs, particularly in patients who failed to respond to steroid or experienced failure during steroid tapering. Moreover, and most importantly, tofacitinib exhibited a favorable safety profile in cancer patients developing irAEs in terms of both toxicity and anti-tumor activity. Future prospective studies are warranted.

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434MO Increased eosinophil is a universal biomarker for immune-related adverse events induced by immune checkpoint inhibitors in various cancer patients: A retrospective multidisciplinary study

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Background: Immune checkpoint inhibitors (ICIs) cause severe and lethal immune-related adverse events (irAEs). However, there are no reports of practical and cross-sectional biomarkers for irAEs common to different types of ICIs and primary tumors. This study examined whether eosinophils proportion could be a universal biomarker for irAEs.

Methods: 614 patients with various cancers (esophageal, gastric, head and neck, lung, melanoma, renal cell, urothelial, other cancer) received with anti-PD-1 monotherapy, anti-PD-L1 monotherapy, or anti-CTLA-4 plus anti-PD-1 combination therapy. We divided into two groups depending on whether patients had experienced an irAEs (irAE group) or not (non-irAE group). Eosinophils proportion were examined before 2-course of treatment.

Results: Patients in the irAE group who had received anti-PD-1 monotherapy (mean, 4.1% vs. 2.4%) and anti-CTLA-4 plus anti-PD-1 combination therapy (mean, 5.2% vs. 3.4%) showed higher eosinophils proportion before 2-course of treatment than those in the non-irAE group ($P < 0.05$). Eosinophils proportion in anti-PD-L1 monotherapy tended to increase in irAE group (mean, 4.3% vs. 2.7%; $P = 0.05$). Furthermore, eosinophils proportion in gastric cancer (mean, 4.5% vs. 2.1%), head and neck cancer (mean, 3.2% vs. 1.9%), lung cancer (mean, 4.5% vs. 2.4%), melanoma (mean, 4.8% vs. 2.5%), renal cell carcinoma (mean, 4.6% vs. 2.7%), and urothelial carcinoma (mean, 5.0% vs. 3.0%) was significantly increased in irAE group than in non-irAE group ($P < 0.05$). The optimal cut-off value for eosinophils proportion against irAEs was 3.0% (area under the curve = 0.668). In multivariate analyses, eosinophils of $\geq 3.0\%$ were an independent factor for irAEs (odds ratio 2.57, 95% confidence interval 1.79–3.67).

Conclusions: An increased eosinophils proportion before 2-course treatment might be a universal biomarker for irAEs in various cancer patients received with different ICI types.

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435MO Initial strategy of corticosteroids-immunosuppressant treatment and the consequent clinical outcome among non-small cell lung cancer patients with severe checkpoint inhibitor pneumonitis: A real-world study

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Late withdrawal