exercise to a programme of tilt training; and (iii) physical manoeuvres such as leg crossing or isometric arm tensions. For this reason, in NMS, physical training should not be recommended as monotherapy. It can be complementary to other interventions.

Conflict of interest: none declared.

References

Clinical vignette

Pericardial involvement in a non-Hodgkin lymphoma patient: coregistered FDG-PET and CT imaging

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An 80-year-old man with a previous myocardial infarct, presented with malaise, weight loss, fever, night sweating, dyspnoea, and bilateral pleural effusion. Cardiac echo revealed a 3 cm pericardial effusion without signs of tamponade and a left ventricular ejection fraction of 60%. After transbronchial biopsy and pleural effusion cytology, large-cell B-cell non-Hodgkin lymphoma was diagnosed.

A whole-body, baseline, FDG-PET scan showed extensive disease with mediastinal, supra- and infraclavicular, abdominal, and splenic lesions (stage IVB). Right pleural involvement was also evident. The most striking finding was massive heart enlargement with diffusely increased uptake (Panel A). Transversal CT section at heart level (Panel C) showed cardiac enlargement, pericardial and epicardial (lamina visceralis) thickening as well as pericardial and pleural effusion, more prominent on the right. The corresponding FDG-PET section revealed intense pericardial–epicardial hypermetabolism (arrows) and increased pleural uptake on the right (Panel D). Anatomical characterization of hypermetabolic sites was confirmed by fused FDG-PET/CT images (Panel E).

R-CHOP (Rituximab, Cyclophosphamide, Doxorubicin, Vincristine, and Prednisone) was initiated. Response to treatment was assessed after the third R-CHOP course by new FDG-PET/CT scan showing complete resolution of all initially detected lesions (Panel B). On CT, marked reduction of cardiac enlargement, pericardial thickening, and pericardial and pleural effusion were shown (Panel F). Cardiac FDG uptake had returned to normal (Panels G and H).

FDG-PET is increasingly applied in staging and response to treatment assessment of lymphomas. Lymphomatous cardiac involvement is generally uncommon. In the present case, pericardial involvement was accurately demonstrated, and early complete remission was documented using baseline and follow-up coregistered FDG-PET/CT imaging.

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