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Abstract

Diagnosis on oncology

APPROPRIATENESS OF THE USE OF PET/CT IN THE RADIO-THERAPY TREATMENT PLANNING FOR HODGKIN'S LYMPHOMA

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At moment, radiation treatment remains a key component for combined modality therapy (chemotherapy, CT, plus Radiotherapy, RT) for Early Stage Hodgkin's Disease (ESHD). The treatments with the CT plus RT, although has behaved a reduction of the incidence of relapse, have determined an increase of the acute toxicity and the iatrogenic complications in the time. In consideration of the high probability of cure of HD patients, the late sequelae treatment-related have a remarkable clinical importance. Insofar, if from a side the RT is the more effective single agent in the care of the initial stages of the HD, from the other one can determine an increase of the late iatrogenic toxicity, which are dependent on the irradiated volume and radiation dose. However, the analysis is

based on the modern concept of cure, assessing risks and benefits by evaluating the extent to which the treatment used was of real therapeutic benefit and its effects on the quality of life of the patients. The efficacy of radiation dose inferior to 36–40, in the treatment of HD patients, has been shown by numerous studies. Besides, the use of the involved field radiotherapy (IFRT), reducing the irradiated fields, it is translated in a diminution of the late toxicity to loaded of irradiated normal tissue. To this purpose, the use of the positron emission tomography/computed tomography (PET/CT) in the therapeutic planning, both in the staging and in the determination of the volume target that in the evaluation of the treatment, can determine a more appropriate delivery of radiotherapy. Always in the optics of the reduction of the size of the radiation field the PET/CT scan (pre-chemotherapy and post-chemotherapy) it allows a greater accuracy in identifying and contouring involved lymph nodes.

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