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IMAGE OF THE MONTH

Monitoring response of advanced Merkel cell carcinoma to Avelumab with ^{18}F-FDG PET/CT

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Merkel cell carcinoma is a rare, aggressive skin cancer with few effective treatments and with poor prognosis in patients with advanced disease.

Current standard care uses various cytotoxic chemotherapy regimens, but responses are rarely durable.

Avelumab is an immune checkpoint inhibitor that targets a protein called PD-L1. PD-L1 is over-expressed in most cases of Merkel cell tumours [1, 2].

We present the case of a 75 year-old man who underwent exeresis of Merkel cell carcinoma with dermo-hypodermic localization and involvement of the resection margins of the right gluteal region.

Inguino-crural-obturator right lymphadenectomy documented the presence of metastasis in 7 of the 18 excised lymph nodes.

Then, the patient underwent first-line chemotherapy (carboplatin and etoposide) and second-line chemotherapy (adriamycin and cyclophosphamide), completed in September 2017.

In March 2018, in light of an MRI which showed numerous right left lower limb lesions and extensive lymphedema and marked fluid imbibition of the limb, he started Avelumab.

He received 8 cycles of Avelumab with no significant side effects.

^{18}F-FDG-PET/CT before Avelumab was started showed multiple cutaneous and sub-cutaneous lesions with focal uptake in right gluteal region and lower limb lesions, a diffuse cutaneous and sub-cutaneous uptake and right leg lymphedema.

Following completion of Avelumab therapy, FDG PET/CT showed a significant decrease in the number of right lower limb lesions. Moreover, cutaneous and subcutaneous diffuse uptake receded and lymphedema was no longer present.

Whole-body ^{18}F-FDG PET/CT can be used for monitoring response in patients with metastatic, diffuse Merkel cell carcinoma to active immunotherapy [3].

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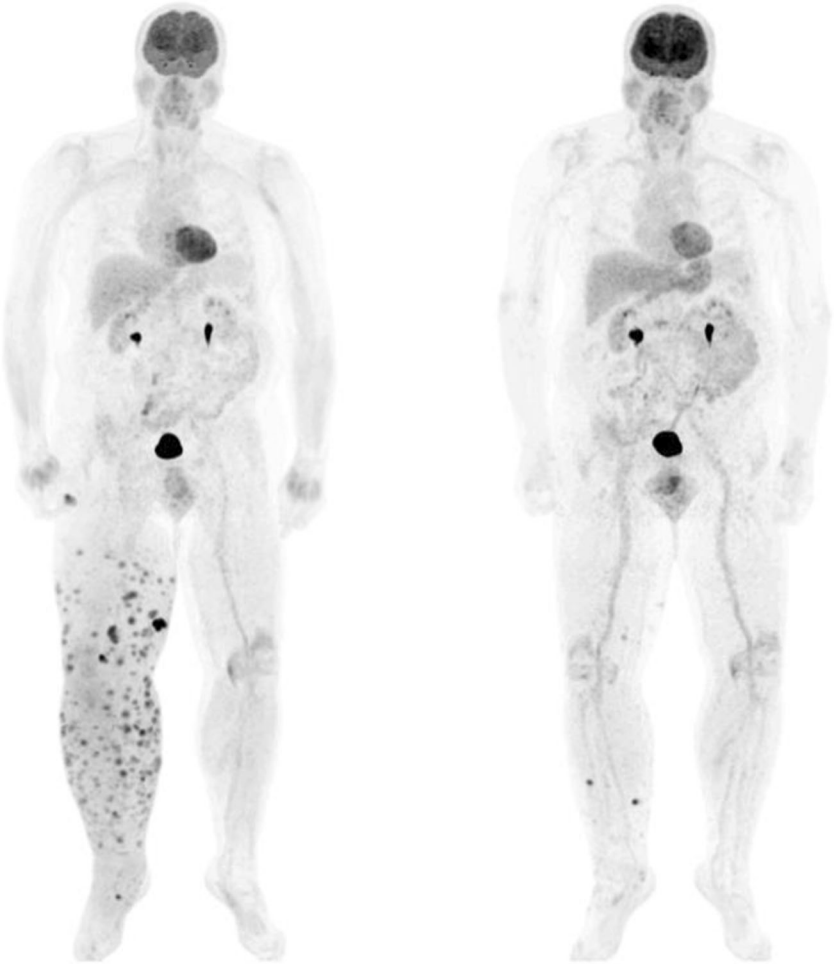

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