

Recurrent autoimmune encephalitis related to immune checkpoint inhibitors

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Case summary

- A 57-year-old woman developed autoimmune encephalitis under the combination of pembrolizumab and nivolumab immunotherapy.
- Her Stage 4 lung adenocarcinoma was highly responsive to immunotherapy, therefore nivolumab as a single agent was continued.
- She had a milder episode of encephalitis 2 years after the first episode, just before the last dose of nivolumab.
- The previous whole-body PET-CT and lung MRI demonstrated that all malignant lesions had disappeared successfully.



04/18
Cranial radiation
therapy

06/18
NCSE 10 days
after the ICI

05/20
Milder episode of
encephalopathy,
Seizure

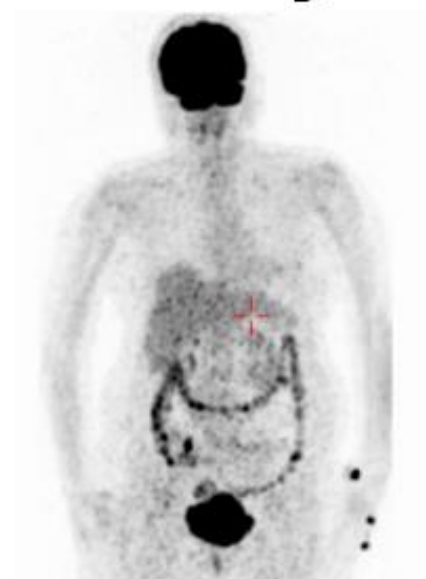
05/21
Last PET scan

03/18
Left sided
occipital
metastasectomy

06/18
Pembrolizumab+
nivolumab

09/18
Single agent
nivolumab

07/20
Confusion
triggered by
COVID-19 vaccine



Treatment was discontinued in all previously reported cases of ICI-induced encephalitis, thus our case represents valuable evidence in terms of continuation of ICIs for selected patients even with high-grade nIRAEs

This case provides valuable information on the possibility of continuing ICI treatment in patients with nIRAEs, by carefully judging the chance of tumour freedom versus adverse events on an individual patient basis.