Immune mediated colitis caused by lung cancer treatment with atezolizumab

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INTRODUCTION

Atezolizumab is an IgG1 isotype monoclonal antibody against the protein programmed cell death-ligand 1 (PD-L1). PD-L1 may be highly expressed in some tumors and is believed to inhibit immune cells that recognize and attack tumor cells. Inhibition of PD-L1 can remove its inhibitory effect and provoke an anti-tumor response.

In October 2016, the Food and Drugs Administration (FDA) approved atezolizumab for the treatment of patients with metastatic non-small cell lung cancer after disease progression during or following platinum based chemotherapy.

CASE REPORT

We present the case of a 43-year-old male with stage IV lung adenocarcinoma in progression, despite standard chemotherapy. He was participating in a clinical randomized trial with four cycles of chemotherapy as follows: cisplatin, pemetrexed and atezolizumab. He showed a good tolerance.
After the last cycle of chemotherapy, he had bloody diarrhea and fever. Stool cultures were negative. A colonoscopy was performed and a pancolitis with a multiple fibrin-coated ulcer was identified. Numerous glandular crypts with cryptic micro-abscesses and a chronic inflammatory lymphoplasmocytic infiltrate were found on biopsy of the colon. These histological findings are similar to those described in ulcerative colitis.

CONCLUSION

Immune mediated colitis is a possible adverse event that is poorly described. It occurs in 19.7% of all patients receiving atezolizumab and requires the administration of corticosteroids for its resolution.

REFERENCES