Introduction

- Immune checkpoint inhibitors (ICIs) are associated with distinct inflammatory eruptions such as bullous pemphigoid or lichenoid eruptions.
- Less is known about the development of autoimmune/autoinflammatory disorders including cutaneous connective tissue diseases (CTD) from immunotherapy; frequency of these eruptions remain to be studied.
- There are reports of de novo cutaneous connective tissue diseases (CTD) associated with ICI therapy including scleroderma, dermatomyositis, cutaneous lupus, eosinophilic fasciitis, and lupos nephritis.

Objectives

To evaluate the frequency, demographics, presentation, diagnostics, treatment, and impact on immunotherapy of de novo cutaneous CTD among patients on ICIs.

Methodology

- After institutional review board approval, we queried electronic medical records and found 4,487 patients on ICI therapy.
- We retrospectively reviewed and identified patients among this cohort who had possible de novo cutaneous CTD after ICI therapy.
- We searched for patients with de novo scleroderma, systemic sclerosis, dermatomyositis, cutaneous lupus, subacute cutaneous lupus, systemic lupus erythematosus, eosinophilic fasciitis, and discoid lupus.

Results

We identified 11 patients of 4,487 patients (5 females, 6 males) treated with ICIs and developed a cutaneous CTD for frequency of 0.025%. There were 8 cases of subacute cutaneous lupus erythematosus (SCLE), 1 case meeting the new ACR/EULAR criteria for systemic lupus erythematosus (SLE), 1 case of eosinophilic fasciitis, and 1 case of dermatomyositis (Table 1).

Discussion

- A major finding of this study was the disproportionate finding of 8 SCLE cases (72.7%). There was 1 case of de novo SLE based on the new ACR/EULAR criteria for SLE and no other cases of cutaneous lupus erythematosus in our cohort.
- SLE may be more challenging to diagnose as it presents with a broad spectrum of clinical and laboratory findings in comparison to SCLE, which typically has characteristic and pronounced presenting features.
- It is unclear if immunotherapy-associated SLE has discerning features from idiopathic SLE.
- Early diagnosis and appropriate management can prevent interruption of life-prolonging immunotherapy and minimize use of globally immunosuppressive treatment.

Conclusions

- Approximately 0.025% of patients treated with immune checkpoint inhibitor therapy at our institutions developed de novo CTD including subacute cutaneous lupus erythematosus (SCLE), systemic lupus erythematosus (SLE) meeting ACR/EULAR criteria, eosinophilic fasciitis, and dermatomyositis.
- Among our cohort, there was a disproportionate finding of immunotherapy-associated SCLE.

References


Disclosures: None declared.