FOSTERING EXCELLENCE IN CARE AND OUTCOMES IN PATIENTS WITH STAGE III/IV NSCLC

O'Neal Comprehensive Cancer Center at the University of Alabama

Birmingham, Alabama

Introduction

The O'Neal Comprehensive Cancer Center at the University of Alabama at Birmingham (UAB) is Alabama's only cancer center designated by the National Cancer Institute and is a national leader in driving cancer research, advancing new cancer treatments, engaging communities in cancer prevention and early detection initiatives, and training the next generation of cancer physicians and scientists.

Problem Statement

Patients with advanced NSCLC who are treated with immune checkpoint inhibitor therapy may develop serious immune-related adverse events (irAEs). Front-line clinicians may not be properly identifying signs of possible irAEs and this may lead to delays in managing irAEs.

Improvements

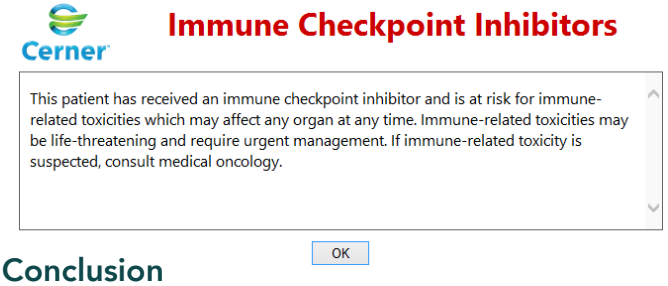
- Form an immunotherapy toxicity working group
- Educate front-line clinicians about irAEs
- Develop an electronic clinical alert to remind clinicians about irAEs

At UAB, the lung cancer team recognized the need to improve how they identify and manage immune-related adverse events (irAEs) associated with the use of immune checkpoint inhibitors in patients with advanced lung cancer.

The cancer center staff formed an immunotherapy toxicity working group that meets monthly to review irAE cases and discuss ways to improve management strategies. This group discussed the need to provide education to front-line clinicians working in the emergency department, urgent care, and primary care offices.

The oncology team began their efforts by developing and conducting a survey for their clinicians to assess gaps in knowledge and care around the identification and management of irAEs. The survey was sent to non-oncology clinicians and revealed the need for education about when irAEs may occur and around the clinical management of irAEs. The survey also revealed that 67% felt it would be useful to have an electronic clinical alert on the EHR informing them that the patient is being treated on immunotherapy. To meet these needs, the lung cancer oncologists began by delivering educational presentations at morning meetings, noon conferences, and grand rounds. They developed an infographic (see image on back side) to reinforce key aspects of irAEs and posted these in public places such as nursing break rooms, conference rooms, etc.

By working with the hospital IT department, the lung cancer team developed and launched an electronic alert to notify clinicians that patients were being treated with immune checkpoint inhibitors and may develop symptoms that are consistent with irAEs (see image below). The alert was designed to remind clinicians to consult medical oncology promptly so that irAEs could be managed in a timely fashion.



Conclusion

Recognizing that a growing number of patients were receiving immunotherapy for multiple types of cancers, the immunotherapy toxicity working group plans to develop additional educational resources for clinicians and to expand their efforts at improving awareness about irAEs.

ACCC
Association of Community Cancer Centers

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IMMUNE RELATED ADVERSE EVENTS

What are Immune Checkpoint Inhibitors?

Immune checkpoint inhibitors are antibodies that block the function of inhibitory immune checkpoints (e.g., PD-1, PD-L1, CTLA-4). They "take the brakes off" the immune system, allowing it to recognize and kill cancer cells.

What cancers do they treat?

Immune checkpoint inhibitors are now FDA approved for over 50 indications in solid tumors as well as some types of lymphoma.

What are their side effects?

Immunotherapy side effects are called immune related adverse events. These side effects can mimic other diseases such as autoimmune disorders, infections, or tumor progression.

Immune related adverse events can affect any organ and sometimes multiple organs!

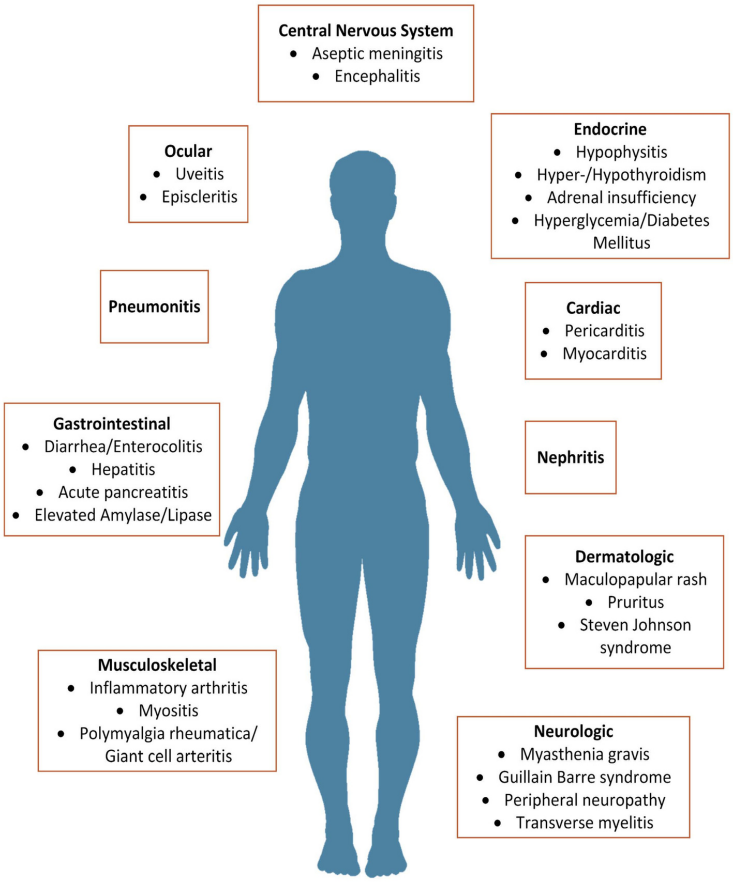
When do immune related adverse events occur?

Duration of risk for immune related adverse events is unknown, occurring as early as within 24 hours to 100 days after the last dose of treatment.

How are immune related adverse events treated?

Treatment requires multidisciplinary input. The Hematology Oncology consult team should be alerted if immune related adverse event is suspected.

Immune related adverse events can affect any organ and sometimes multiple organs!



To learn more about management of immune related adverse events, go to:

Brahmer JR, Lacchetti C, Schneider BJ, Atkins MB, Brassil KJ, et al. Management of immune-related adverse events in patients treated with immune checkpoint inhibitor therapy: American Society of Clinical Oncology Clinical Practice Guideline. J Clin Oncol. 2018;36(17):1714-1768

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