



Multidisciplinary Approaches to Cancer Symposium

Early Symptoms of Immunotoxicity & What to Look For

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Disclosures

- I do not have any relevant financial relationships.

This presentation and/or comments will provide a balanced, non-promotional, and evidence-based approach to all diagnostic, therapeutic and/or research related content.

Cultural Linguistic Competency (CLC) & Implicit Bias (IB)

STATE LAW:

The California legislature has passed Assembly Bill (AB) 1195, which states that as of July 1, 2006, all Category 1 CME activities that relate to patient care must include a cultural diversity/linguistics component. It has also passed AB 241, which states that as of January 1, 2022, all continuing education courses for a physician and surgeon **must** contain curriculum that includes specified instruction in the understanding of implicit bias in medical treatment.

The cultural and linguistic competency (CLC) and implicit bias (IB) definitions reiterate how patients' diverse backgrounds may impact their access to care.

EXEMPTION:

Business and Professions Code 2190.1 exempts activities which are dedicated solely to research or other issues that do not contain a direct patient care component.

The following CLC & IB component will be addressed in this presentation:

- *Awareness of implicit bias in addressing patient concerns surrounding early symptoms of immunotoxicity.*

Objectives



Identify role of immunotherapeutic agents in oncology/hematology management



Discuss potential adverse effects unique to this class of agents



Review presentation of adverse effects by system



Describe early symptom recognition approaches

Immunotherapy

- A revolution in therapy
- Started over two decades ago and has taken the world of malignancy by storm
- CTLA-4; PD-1 and PD-L1; An alphabet soup of new opportunity and hope
 - Immune checkpoint inhibitors; programmed cell death and PD ligand 1
- Utilizing the patient's immune system to attack and destroy cancer cells
- Success in many spaces- skin, lung, GI, breast, and hematologic malignancies



Immune Related Adverse Effects (irAE)

The question is not what system could be affected...

Due to differences in the mechanism of action in immunotherapy, the AEs also differ from cytotoxic and targeted therapies

Present in approximately 15-90% of patients

Delayed onset and related to the immune activation

Causation and management continue to be a perplexing challenge, but we must look to the existing knowledge to allow patients to receive maximum benefit and risk minimal harm during therapy

Early irAEs vs Late irAEs

- Early irAEs related to epithelial inflammation
- Think “itis”
- Skin, gut, lungs
- Late irAEs
- Can be delayed by as long as 2 years
- Less common
- Generally localized and organ-specific

Presentation by System Overview

Fatigue- primary issue vs symptom of deeper cause (endocrine)

Infusion related reaction- flu-like symptoms

CRS-

Dermatologic and mucosal toxicity-

Diarrhea/Colitis-

Hepatotoxicity-

Pneumonitis- new or worsening cough, SOB, DOE

Opportunistic Infections

Endocrinopathies

- Hypothyroid-fatigue, cold- CHECK TSH AND Free T4
- Hyperthyroid- look for new symptoms followed by persistence
- Hypophysitis- fatigue and headache (differentiate from adrenal insufficiency utilizing ACTH and cortisol)
- Acute onset type 1 diabetes- severe hyperglycemia or DKA

Renal

Neurologic-headache and peripheral neuropathy are most common symptoms

Cardiovascular- look for arrhythmias, pain, and symptoms of “itis”

Hematologic- ITP (bruising, oozing), Autoimmune hemolytic anemia (fatigue, pallor),

Early Recognition of Symptoms=Early Treatment=Successful Management



Challenge- the symptoms are masters of mimicking others



Question- is it infection, progression, another condition, of irAE????



Keys to Success-

- Up to date knowledge of irAEs for agents prescribed by provider
- Empowering patient with knowledge of irAEs
- Frequent assessment of patient including routine lab monitoring
- Consistent utilization of toxicity grading
- Collaboration with patient and other team members

Early Recognition Pearls



Review the potential irAEs for each agent prior to prescribing/administering



Communicate to patients and caregivers in the potential risks and what to look for-verbally and in writing



Consistent, systematic assessment of patient at every encounter

Ask questions utilizing patient-friendly language
Pertinent lab review



Low Threshold for aggressive, focused assessment and care



Ask, Assess, and ACT!

References

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- NCCN Guidelines: Management of immunotherapy-related toxicities. Version 1.2020.