SA Palliative Care

Community Pharmacy Update

A joint initiative of South Australian Palliative Care Services

Although many people tolerate immunotherapy well, it does have its own distinct side effect profile which can affect multiple organ systems and cause significant morbidity. These adverse effects can occur during treatment or even a long time after treatment cessation, meaning it is important for all healthcare providers to be aware of the risks.

Mechanism

Given immunotherapy works by causing the immune system to become 'over-active' to fight the cancer, this can result in what are referred to as *immune-related adverse events (irAEs)*. These syndromes present similarly to an autoimmune response, as the immune system begins to attack its own tissue. It can affect most organ systems, but some more commonly than others. irAEs can present in different categories of severity, from Grade 1 (mild) to Grade 4 (most severe).

irAE	Example of symptoms/labs
Colitis*	Diarrhoea, abdominal pain
Hepatitis*	Deranged LFTs, jaundice
Dermatological*	Skin rash
Pneumonitis*	Cough, shortness of breath
Thyroiditis*	TFT changes, hyperthyroid/ hypothyroid symptoms
Hypophysitis*	Adrenal insufficiency – headache, visual disturbance
Nephritis	Increased creatinine
Neurological	Headache, confusion

*Most common

Incidence

irAEs usually present within weeks to 3 months after initiation of immunotherapy, but can occur up to a year after treatment discontinuation. This delay in occurrence has implications for all clinicians to be monitoring irAEs as the patient may no longer regularly reviewed by oncologist if treatment is ceased.

Rates of irAEs are highest in combination therapy with CTLA-4 inhibitors and seem to have earlier onset. 30% of patients develop grade 3-4 irAEs with CTLA-4 inhibitor monotherapy. Treatment with PD-1 inhibitor monotherapy has a comparatively lower incidence of irAE, but they are more widely used and present a clinically significant risk.

Management

Management of irAEs is mostly determined by their severity. Some patients with mild or grade 1 reactions may require symptom management only and can continue with immunotherapy.

Severe cases generally require hospitalisation and IV corticosteroids (3-5 days), then oral corticosteroids (high dose and wean over 4-12 weeks) with concurrent pneumocystis jirovecii pneumonia prophylaxis and gastroprotection.

Treatment delay or cessation of immunotherapy may be required taking into consideration previous effectiveness of the treatment. Regardless, immunotherapy should only be reintroduced (if deemed appropriate) once the corticosteroid dose is equivalent to oral prednisolone 10 mg daily or less.

The next edition will be a case study of a patient who developed an irAE and how this was managed as an inpatient and ongoing in the community.

Thanks to Maddy Hamden for preparing this update

Useful Resources

- eviQ guidelines
- ESMO clinical practice guidelines (1.69MB pdf)

For more information

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