

HEAT AND MEDICATION



Remember – drugs can affect heat-related illness!

Think of the below mechanisms:

- heat perception (i.e. any drugs that cause cognitive impairment)
- cardiac output (i.e. beta blockers)
- peripheral vasodilation (i.e. amlodipine)
- sweating (i.e. any drugs with anticholinergic properties including first generation antihistamines and TCAs)
- renal function (i.e. diuretics)
- body hydration (i.e. lithium)
- electrolyte status (i.e. diuretics)
- small therapeutic window (i.e. digoxin)

BADCLAP

A helpful anagram for remembering heat and medication management



1. BETA BLOCKERS

Beta blockers reduce blood flow to the skin and inhibit sweating.

B

2. ACE INHIBITORS

ACE inhibitors can increase the risk of renal impairment during heat waves.

A

3. DIURETICS

Diuretics can increase the risk of renal impairment during extreme heat events.

D

4. ANTICHOLINERGENICS

Medications with anticholinergic properties can inhibit sweating, reducing heat elimination from the body.

C

5. LITHIUM

Reduced hydration affects levels of lithium, causing increased risks of lithium toxicity.

L

6. ANTIDEPRESSANTS

Antidepressants can cause impaired sweating and cooling. SSRIs can cause increased sweating leading to dehydration, TCAs reduce sweating, reducing heat elimination from the body.

A

7. PANTIPSYCHOTICS

Antipsychotics with anticholinergic effects can inhibit sweating, reducing heat elimination from the body.

P

Sorensen C, Hess J. Treatment and Prevention of Heat-Related Illness. *N Engl J Med*. 2022;387(15):1404-1413. doi:10.1056/NEJMc2210623



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