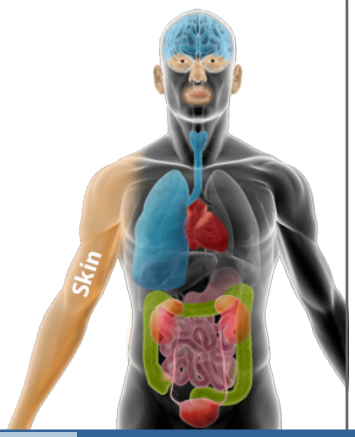
NIH Toxidrome // *Anticoagulants*

Affected Areas

Hematologic (with secondary system engagement)



Immediate Symptoms*

Mild to moderate:

Prolonged INR or average prothombin time above 1.5
Epistaxis
Petechia
Lethargy
Weakness
Pallor

Severe:

Hematuria
Refractory epistaxis
Ecchymosis
Hemoptysis
Melena
Hematemesis

(Immediate Symptoms continued...)

Life threatening

Severe organ hemorrhage
Shock

**Onset of symptoms may not appear immediately after dosage*

Ongoing Symptoms

Overexposure is initially asymptomatic and may remain that way even as prothrombin times increase.

Anticoagulants exert their effect after a latent period of 12 to 24 hours, and their effect lasts for two to five days.

Examples

Chemical Warfare Agents

None currently listed

Toxic Industrial Chemicals/Toxic Industrial Materials

Coumadin
Superwarfarins
- Brodificoum
- Bromodialone
- Diphacinone

Common Treatment Protocols

Prolonged clinical and analytical follow-up

Close monitoring using prothrombin time (PT) and plasma thromboplastin time (PTT)

Fresh frozen plasma or whole blood, along with Factor VII therapy, for acute bleeding

Close clinical observation for occult bleeding or life-threatening hemorrage

Vitamin K1 if large ingestion is suspected

Sensitive Populations

No particularly sensitive populations

Concerns About This Syndrome

Effects with minimal presentation immediately after exposure decreases the likelihood of mass casualty response.

The anticoagulants inhibit vitamin K epoxide reductase, thus blocking the resuse of vitamin K and rapidly depleting the liver of its active vitamin K stores.

For non-vitamin K dependent treatment of toxicity is more difficult than traditional anticoagulants, but involve the administration of blood products including FFP (fresh frozen plasma).

CHEMM Not meant to be a complete care guideline. Please refer to the CHEMM website for more information: https://chemm.hhs.gov/mmghome.htm