

Southern Illinois Regional EMS System

JJ-27 THIAMINE

Class:

- Vitamin (B₁)

Description:

- Thiamine combines with adenosine triphosphate to form thiamine pyrophosphate, a coenzyme necessary for carbohydrate metabolism. Most vitamins required by the body are obtained through diet; however, certain states such as alcoholism and malnourishment may affect the intake, absorption, and utilization of thiamine. The brain is extremely sensitive to thiamine deficiency.

Onset and Duration:

- Onset: Rapid
- Duration: Depends on the degree of deficiency

Indications:

- Coma of unknown origin (with administration of dextrose 50% or Naloxone)
- Failure of increased blood glucose and desired response after Dextrose administration
- Delirium tremens
- Wernicke's encephalopathy

Contraindications:

- None significant

Adverse Reactions:

- Hypotension from rapid injection or large dose
- Itching, rash, pain at injection site
- Nausea and vomiting.
- Allergic reaction (usually from IV injection; rate); angioedema.

Drug Interaction:

- None significant

How Supplied:

- 1 and 2mL vials (100mg/mL).

Dosage and Administration:

- Adult:
 - 100mg slow IV/IO
- Pediatric:
 - Not recommended in the pre-hospital setting

Special Considerations:

- Pregnancy Category A (Category C if dose exceeds recommended daily allowance).
- Large IV doses may cause respiratory difficulties
- Anaphylactic reactions have been reported