



# Human Granulocytic Anaplasmosis



## Overview

### Micro

- Gram  $\ominus$
- Obligate Intracellular

### Transmission

- Ixodes tick
- Other - rare
  - Transplant
  - Blood transfusion

### Epidemiology

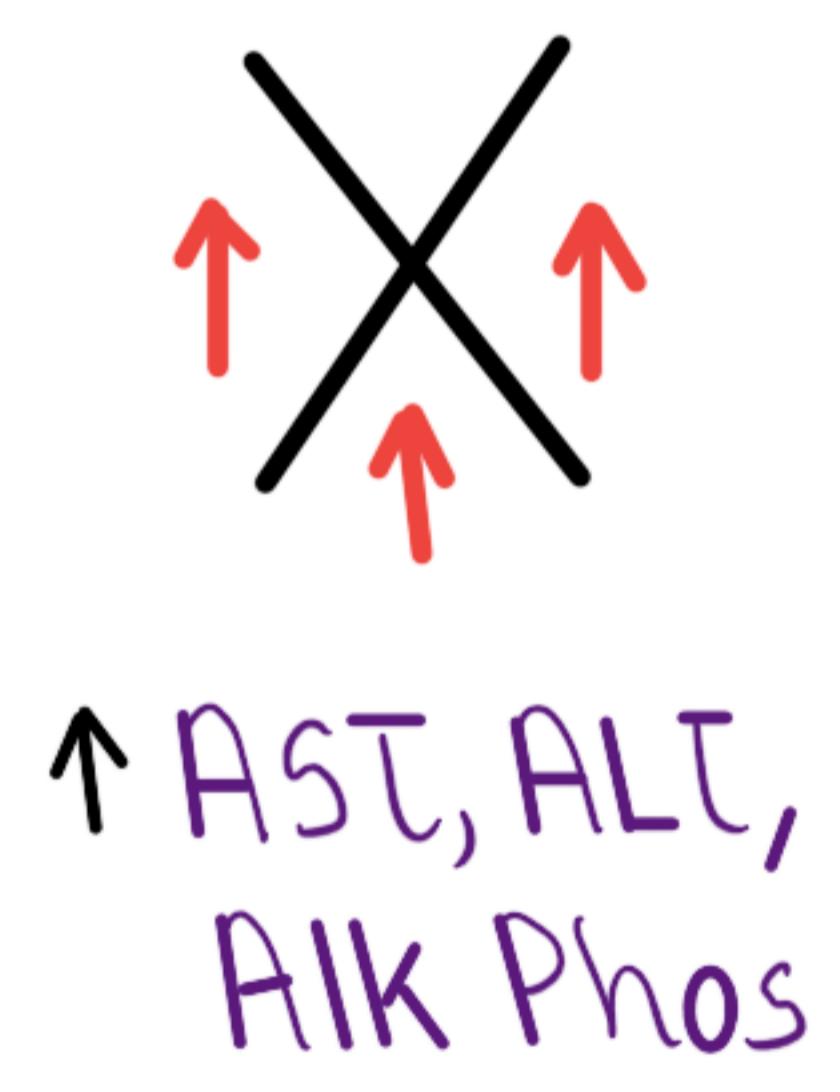
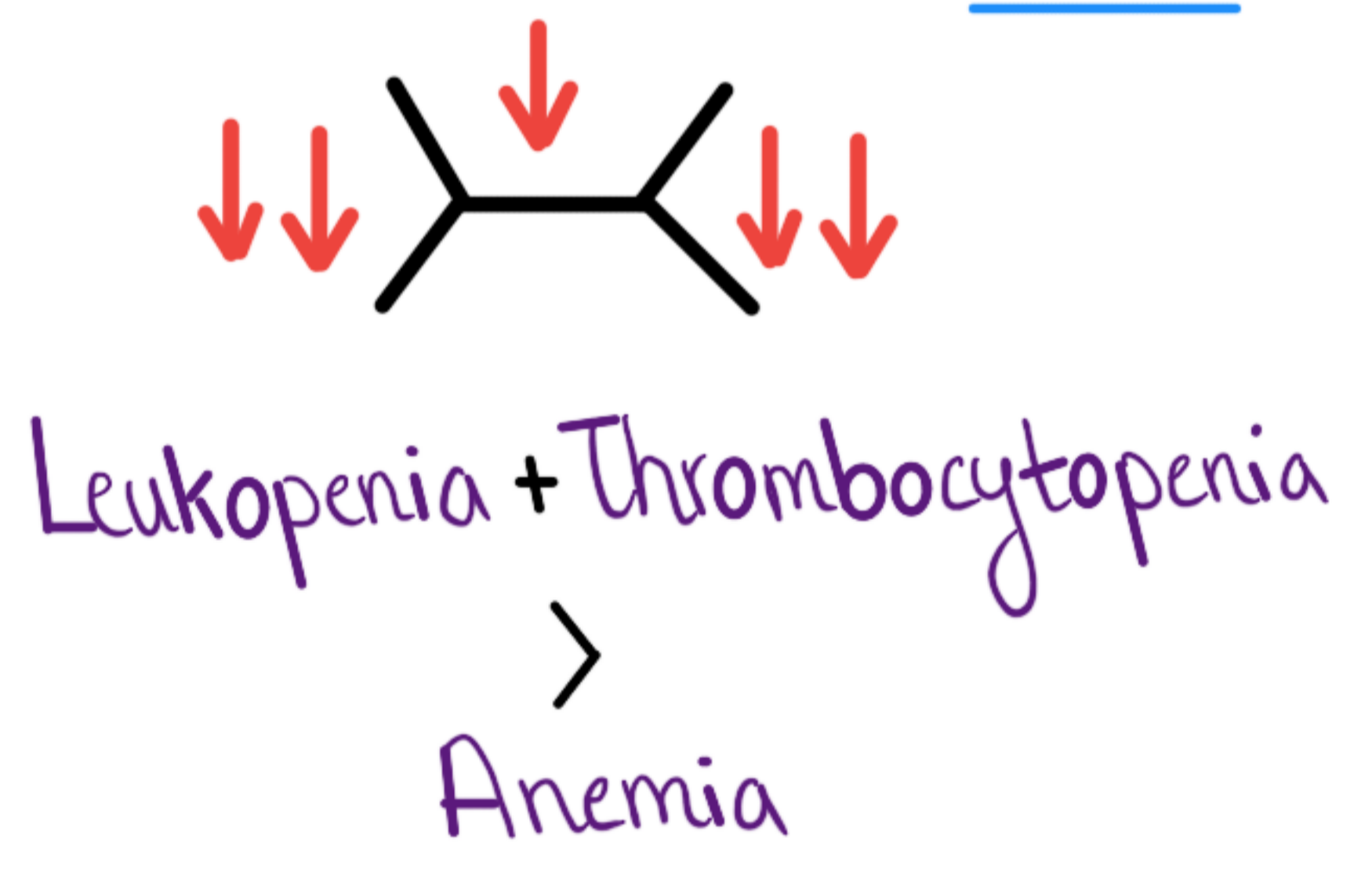
- More common than HME
- Northeastern  $\oplus$  Upper Midwest most common

## Clinical Manifestations

### Signs/Symptoms

- Fever
- Headache
- Myalgias
- GI Sx

### Labs



### Complications

- Meningoencephalitis
- ARDS
- DIC
- Opportunistic Infections
- Bells Palsy
- Brachial Plexopathy

## Dx

### Clue

Prompt response to Doxycycline

### Confirmation

- Serology
- Blood Smear - >50%
  - Direct visualization of morulae
- PCR
- Culture - rare

### Tx

### Preferred

Doxycycline

### Alternate

Rifampin

