Community-Associated Methicillin-Resistant *Staphylococcus aureus* (CA-MRSA)

IDPH Grand Rounds
December 13, 2006

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CA-MRSA: Clinical Features

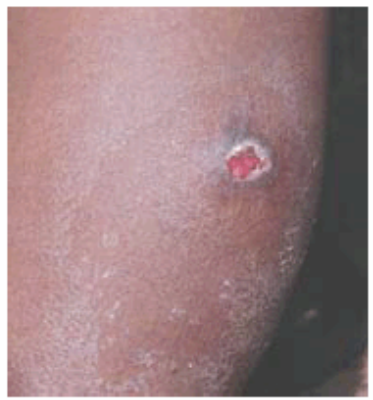
- Skin and soft tissue infections:
  - Furuncles – “boils”
  - Abscesses
  - Cellulitis
- Often confused with spider bites

- Much less common – severe invasive disease

CA-MRSA Outbreaks in Evacuee Centers

30 cases of skin-soft tissue infection at an evacuee center in Dallas, Texas

FIGURE. Methicillin-resistant *Staphylococcus aureus* in the leg of an evacuee from Hurricane Katrina — Dallas, Texas, September 2005



Photo/P Hicks, Children's Medical Center of Dallas

A Real Threat - Today

- Moran et al. NEJM, August 17, 2006
  - Purulent skin and soft-tissue infections
  - 11 university-affiliated emergency departments
  - August of 2004 (one month)

  Results:

  Of 422 patients, 320 (76%) were *S. aureus* and MRSA accounted for 59% overall.

CA-MRSA: Risk Factors for Infection

- Young age
- Contact sports
- Sharing towels or athletic equipment
- Weakened immune system
- Living in crowded or unsanitary conditions
  - military, prison inmates, day cares
- Recent antimicrobial use

Strategies for Clinical Management of MRSA in the Community, CDC March 2006

CA-MRSA: Treatment

- Incision and Drainage alone
- I&D plus Antimicrobial agents
- Antimicrobial agents alone

CA-MRSA: Is an Antibiotic Needed?

Consider:

- Severity and rapidity of progression/cellulitis
- Signs/symptoms of systemic illness
- Associated co-morbidity
- Extremes of patient age
- Location of abscess
- Lack of response to I&D alone

Strategies for Clinical Management of MRSA in the Community, CDC March 2006

Empiric Outpatient Antibiotics

- Not optimal:
  - Fluoroquinolones
  - Macrolides/Azalides

- For consideration:
  - Clindamycin
  - Tetracyclines
  - Trimethoprim-sulfamethoxazole
  - Rifampin (used in combination)
  - Linezolid

Preventing Spread of CA-MRSA

- Keep wounds covered with clean dry bandages
- Wash hands regularly & properly
- Keep personal items personal
- Clean linens
- Restrict participation in contact sports if above measures are not possible
- Pet to owner / owner to pet spread?