

PATIENT INFORMATION

MRSA AND CIRCUMCISION

What is *Staphylococcus aureus*?

Staphylococcus aureus, commonly called “staph,” is an infectious disease-causing bacterium (germ).¹ Under the microscope, it has a golden color, from which it derives its name.

What is methicillin-resistant *Staphylococcus aureus* (MRSA)?

MRSA is staph that has mutated to develop resistance to most common antibiotics. Moreover, many strains now carry the toxin-producing Panton-Valentine leucocidin (PVL) gene that causes tissue *necrosis* (death) and *hemolysis* (destruction of red blood cells).² MRSA can be classified as a “flesh-eating bacteria” because of its destructive effect on human tissue.

Where is MRSA found?

MRSA, once found mostly in hospitals (HA-MRSA), now has entered the community (CA-MRSA), and it is found every-where.³ Many healthy people are carriers of CA-MRSA, which is carried on the skin or in the nose.⁴ The incidence of CA-MRSA is increasing in the United States and elsewhere.⁵ CA-MRSA is displacing ordinary staph, so more and more infections are caused by CA-MRSA.⁷ CA-MRSA is carried back into hospitals by medical staff, the public, and patients.⁵ Outbreaks of staph or MRSA periodically occur in newborn nurseries.⁶

What does this have to do with circumcision?

A newly circumcised male infant has an open wound on his penis through which staph may enter.⁷ Staph frequently is spread in newborn nurseries by mothers⁸ and caregivers who carry staph on their skin and in their noses. A circumcised boy may be infected in hospital or after he arrives home. A circumcised boy is twelve times more likely to get a staph infection.⁹

What diseases does MRSA cause?

MRSA produces at least fifteen toxins.³ The toxins produced by MRSA have long been known to cause staphylococcal scalded skin syndrome in newborn boys,⁷ in which all the skin peels off. Other MRSA-caused diseases include impetigo, empyema (pus in a body cavity, usually the chest), abscesses, furunculosis, osteomyelitis, lung abscesses, toxic shock, and necrotizing fasciitis.^{2,7} If the infection gets into the blood and becomes systemic, such as necrotizing pneumonia (a highly fatal disease), any organ of the body can be involved.² Most importantly, MRSA sharply increases the risk of death.¹⁰

Is MRSA infection really a fatal disease?

The first post-circumcision death from staph infection was reported in 1943.¹¹ The death rate from MRSA infection is sharply higher than the death rate from the older variety of staph.[10] Klevens *et al.* estimate MRSA kills 18,000 Americans every year.[12]

Does sterile operating technique guarantee safety?

No. The infant boy may already be colonized with staph before the operation, or the staph may enter the wound after the operation.

How do I protect my son from staph infection?

Hand washing is important in preventing staph infection,¹³ as is avoiding medically unnecessary, non-therapeutic surgery. Infant circumcision is an example of medically unnecessary, non-therapeutic surgery.

What should I do if I suspect my child has a staph or MRSA infection?

Contact your doctor immediately. Staph or MRSA are virulent, potentially life-threatening infections.³ Your son may require hospitalization.

How is MRSA treated?

Abscesses should be drained, a culture should be taken to see which infectious organism is involved, and a sensitivity test run to see which antibiotics can be used to treat the infection.⁴ Systemic MRSA frequently is treated in hospital with an intra-venous antibiotic drip using a powerful antibiotic.

Does MRSA really increase the risk to the baby boy?

Yes. MRSA is an emerging threat in the 21st century, just as HIV was an emerging threat in the 1980s. The risk of infection is increasing as MRSA becomes more common. Boys are more susceptible to skin colonization.⁷ Infants have immature immune systems.¹³ MRSA infection is passed around in nurseries.⁶ Circumcision makes a baby boy 12 times more likely to get a MRSA infection.⁹ A localized infection can quickly become a life-threatening, invasive systemic infection.

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