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Safety Notice 017/10

24 December 2010

Group A Streptococcal Maternal Sepsis

This Safety Notice is designed to highlight a possible emerging issue with respect to Group A Streptococcal maternal sepsis.

Background

NSW Health has been notified of a number of cases of beta-haemolytic Lancefield group A streptococcal (GAS) maternal sepsis during 2010. In 2007 it was reported that the incidence of invasive GAS disease in temperate Australia is greater than previously appreciated.¹ Over recent decades, a resurgence of invasive GAS infection has also been observed in industrialised countries around the world. In the UK during the 2006-2008 triennium, sepsis was the leading cause of maternal mortality. Whilst maternal mortality was declining overall, maternal deaths due to sepsis rose, particularly those associated with community-acquired GAS infection.²

Epidemiology²

There is usually a seasonal pattern to infection with most occurring during the colder months. Cases of maternal sepsis are often preceded by sore throat or other upper respiratory tract infection. Ethnic origin and obesity have previously been identified as risk factors. Sepsis may occur antenatally, however, most morbidity and mortality is experienced in the postpartum period (puerperal sepsis). Whilst most postpartum maternal deaths associated with GAS occur after operative delivery, healthy women with uncomplicated pregnancy and delivery are still at risk of significant sepsis.

PLEASE NOTE: Sepsis associated with pregnancy is often insidious in onset but can progress very rapidly. In the postpartum period the risk of serious sepsis should not be overlooked. Early recognition, urgent transfer to hospital and prompt, aggressive treatment is required. Whilst presentation may be atypical, tachypnoea, neutropenia and hypothermia are all ominous signs. Diarrhoea is a common symptom of pelvic sepsis and antenatally the combination of abdominal pain and abnormal or absent fetal heart rate may signify sepsis rather than placental abruption.

Steps to Minimise Risk of GAS Maternal Sepsis

- 1. Antenatal and postnatal education that raises the awareness of good personal and perineal hygiene.** All pregnant and recently birthed women need to be informed of the risks of and signs and symptoms of genital tract infection and how to prevent its transmission. The association of streptococcal sore throat and GAS sepsis needs to be highlighted.
- 2. Appropriate antibiotic prophylaxis for:**
 - Miscarriage with infection (sepsis),
 - Preterm and/or prolonged rupture of membranes,
 - Caesarean section operations (perioperative),
 - Anal sphincter tear repair.
- 3. Adequate management of genital tract sepsis includes:**
 - Early recognition and prompt management,
 - Clear clinical leadership with a multidisciplinary clinical approach,
 - Careful documentation of both signs and treatment,
 - Adequate doses and prompt commencement of appropriate systemic antibiotics,
 - Carefully managed fluid balance.

References

- O'Grady K-A, Kelpie L, Andrews RM et al. The epidemiology of invasive group A streptococcal disease in Victoria, Australia. *MJA* 2007; 186(11): 565-569
- Centre for Maternal and Child Enquiries. CMACE Emergent Theme Briefing #1: Genital Tract Sepsis. September 2010.

Suggested Actions by Area Health Services / Local Health Networks:

- Ensure this safety notice is distributed to all relevant staff to ensure they are aware of the possible emerging issue of Group A Streptococcal maternal sepsis.
- Ensure staff members are aware of the steps for early recognition and treatment.
- Ensure clinicians involve local microbiologists or infectious disease specialists in the management of confirmed or suspected cases of GAS.

Distributed to:

- Chief Executives
- Directors of Clinical Governance
- Directors of Clinical Operations
- Directors of Obstetrics
- Directors of Nursing and Midwifery
- General Practitioners

Action required by:

- Directors of Clinical Governance

We recommend you also inform:

- Directors of Public Health Units
- Community Health Managers

Expert Reference Group

Content reviewed by:

- Maternal and Perinatal Committee
- Maternal and Perinatal Health Priority Taskforce
- Obstetric Advisor, NSW Health
- Primary Health and Community Partnerships Branch
- Clinical Safety, Quality and Governance Branch

Clinical Safety, Quality and Governance Branch

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