A PROSPECTIVE STUDY OF 3- AND 7-DAY COURSE OF INTRAVENOUS ANTIBIOTICS FOR CULTURE-NEGATIVE SUSPECTED NEONATAL SEPSIS IN A PRIVATE TERTIARY HOSPITAL IN DAVAO CITY.

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Background: Duration of antibiotic therapy for suspected neonatal sepsis has no well-defined guidelines. This study will add evidence of possibly shortening the duration of antibiotic therapy in culture-negative suspected neonatal sepsis.

Objective: To compare the outcome of neonates with culture-negative suspected neonatal sepsis treated with 3-day and 7-day course of antibiotics.

Design: Prospective cohort design.

Setting: Six-month study in a tertiary hospital in Davao City.

Participants: Eighty-eight term asymptomatic neonates born to mothers with risk factors for sepsis presenting with abnormal complete blood count (CBC) and/or C-reactive protein (CRP), negative blood culture, and treated with antibiotics, subsequently allocated to 3-day group and 7-day group according to duration of antibiotics decided upon by the attending physician.

Main Outcome Measure: Neonates were followed up 1 week after completion of antibiotics and checked for general well being, signs of sepsis, and episodes of illness requiring readmission.

Results: Baseline demographics are comparable. The most common maternal risk factor for suspected neonatal sepsis was urinary tract infection (40.91%). There was no significant difference in the decrease in white blood cell count after 3 days of antibiotics (p value=0.915). CRP initially positive became negative after 3 days of antibiotics. One neonate from the 3-day group had poor suck 2 days after discharge, work-up showed thrombocytopenia and was readmitted. There was no readmission in the 7-day group.

Conclusion: There was no significant difference in the outcome of neonates treated with 3- and 7-day course of antibiotics for culture-negative suspected neonatal sepsis with regard to general well being, appearance of signs and symptoms of sepsis, and episodes of illness requiring readmission one week after the last dose of antibiotics (p=0.318).

Keywords: *culture-negative suspected neonatal sepsis*, *antibiotic duration*