

A Review of Neonates Exposed to Meconium Stained Amniotic Fluid at a Tertiary Level, Public Hospital in South Africa

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Abstract

Objective: This study aimed to determine the incidence, clinical characteristics, management and outcomes of neonates born through meconium-stained amniotic fluid (MSAF) and those admitted with meconium aspiration syndrome (MAS).

Study design: This was a retrospective study conducted in a tertiary hospital in Johannesburg, South Africa. All neonates born through MSAF, and those admitted with MAS, from January to June 2018 were included.

Results: Incidence of neonates born through MSAF was 44/1000 live births. The median birth weight was 3125 grams and median gestational age was 39 weeks. Forty-eight percent required resuscitation and 55.5% required admission. The incidence of MAS was 10/1000 live births, with 32% requiring invasive ventilation. Mortality in neonates exposed to MSAF was 2.5%, and 9.3% in those with MAS.

Conclusion: The high observed incidence of MSAF and MAS, with associated mortality, necessitate effective intrapartum monitoring and appropriate postnatal management of infants exposed to MSAF to improve outcomes.