

# Different azithromycin protocols for management of preterm prelabour rupture of membranes: a randomized clinical trial

## Abstract

**Background:** Preterm prelabor rupture of membranes is associated with polymicrobial infection; hence broadspectrum antibiotics are recommended. Nowadays, Azithromycin is used instead of Erythromycin due to erythromycin shortages, its ease of administration, decreased cost, and better side effect profile

. This study aimed to evaluate the efficacy of different azithromycin protocols for the conservative management of preterm prelabor rupture of membranes.

**Methods:** It was a single-blinded randomized clinical trial including pregnant women at 24–36+6 weeks with viable singleton pregnancies and confirmed preterm prelabor rupture of membranes from January 01, 2020, to June 01, 2021. The participants were randomized into two groups: Group I was made of women who received Azithromycin 1000 mg PO once, and Group II of women who received Azithromycin 500 mg PO once, followed by Azithromycin 250 mg PO daily for four days. The primary study outcome was the length of the latency period from the diagnosis of preterm prelabor rupture of membranes to delivery (days).

**Results:** The latency period in group I was significantly higher than that in Group II ( $5.80 \pm 5.44$  days vs.  $2.88 \pm 2.37$ ; respectively,  $p=0.0001$ ). The mean gestational age at the time of delivery was significantly higher in Group I ( $p=0.0001$ ). However, postpartum endometritis and respiratory distress syndrome (RDS) rates were significantly higher in Group II ( $p=0.003$  and  $p=0.0001$ , respectively).

**Conclusion:** The higher dose of Azithromycin was associated with better maternal and neonatal outcomes