**“COMPARISON OF EFFICACY OF SHORT-TERM VS CONVENTIONAL ANTIBIOTIC REGIME IN TREATMENT OF NEONATAL PYOGENIC MENINGITIS”**

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**ABSTRACT**

OBJECTIVE: Conventional regime for treating neonatal pyogenic meningitis is parenteral antibiotics for 21 days. We compared the efficacy of short-term course of antibiotics for 14 days to this conventional regime.

METHODS: A randomized control study was conducted in a tertiary care teaching hospital over a period of 11 months. Neonates having birth weight more than 1.5 kg, with pyogenic meningitis were enrolled, and randomly allotted into 2 groups, group A was given antibiotics for 14 days, and group B given conventional regimen for 21 days. Both groups were monitored during hospital stay, and compared on follow-up day 28. The primary outcome measure was treatment failure, in form of recurrence of sepsis/meningitis, and faltering in growth or developmental milestones by day 28.

RESULTS: The treatment success rate in both groups was 100%, as no patient had recurrence of sepsis or meningitis. Mean growth in head circumference on day 28 was 1.8(0.56) cm in group A and 1.62(0.56) cm in group B, p=0.15. Mean weight gain was 540(230) g in group A and 470(180) g in group B, p=0.13. Mean length gain was 2.51(0.95) cm in group A and 2.33 (0.64) cm in group B, p=0.32. On day 28, all patients of group A and B had achieved social smile (p=1.0), 34 from group A and 38 from group B achieved gaze fixation (p=0.37), 21 from group A and 18 from group B could hold head steady (p=1.0). None had developed any sequalae or abnormal OAE.

CONCLUSION: Short course of antibiotics (14 days) for neonatal pyogenic meningitis was as effective as the conventional regime (21 days) in neonates with CSF clearance and clinical improvement by day 7 of antibiotic regime, with additional benefit of shorter hospital stay, and optimum utilization of resources.

KEYWORDS: duration of antibiotics; neonatal pyogenic meningitis; efficacy; treatment failure