EFFECTS OF INDOMETHACIN ON PATENT DUCTUS ARTERIOSUS IN NEONATES WITH CHROMOSOME ABERRATIONS AND / OR CONGENITAL ANOMALIES

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Background and aims: The usefulness of intravenous indomethacin (IND) therapy for patent ductus arteriosus (PDA) in neonates with chromosome aberrations and/or congenital anomalies is unclear. The aim of this study was to evaluate the effectiveness of the therapy in the neonates at a gestational age (GA) of ≥ 35 weeks with clinical symptoms appearing early after birth.

Methods: The subjects were 85 infants with 55 chromosome aberrations (trisomy 21, 30; trisomy 18, 10; and others, 15) and 30 congenital anomalies. The management methods were similar to those used for PDA in low birth weight (LBW) infants.

Results: Slight gastrointestinal bleeding was observed in 12 infants. Complete closure of the PDA [Author1] was observed in 44 infants, and improvement of clinical symptoms due to DA constriction was noted in 23. These 67 infants (79%) were classified as the responder group. The 18 infants who did not show improvement in clinical symptoms were classified as the non-responder group (21%). Statistical analysis showed that the minimum diameter of the DA before treatment was significantly larger in the non-responder group (4.2 ± 0.4 mm [mean $\pm$ SD]) than in the responder group (3.1 ± 0.2 mm).

Conclusions: IND therapy is an effective treatment option before considering surgery for PDA in neonates with chromosome aberrations and/or congenital anomalies. [Author1]Please verify this.