Pediat Therapeut 2016, 6:4(Suppl)
http://dx.doi.org/10.4172/2161-0665.C1.034

7th European Pediatrics and Pediatric Surgery

Role of oral atropine sulphate in conservative management of infantile hypertrophic pyloric stenosis

Ahmar Shamim
MGM Medical College, India

Aim: To assess the efficacy and the effectiveness of oral atropine on clinical outcome and regression of pyloric hypertrophy using ultrasonography in infantile hypertrophic pyloric stenosis (IHPS).

Setting: The study setting was done at the tertiary level teaching hospital. Participants: 28 confirmed cases of IHPS diagnosed on the basis of history, clinical examination and ultrasonography.

Methods: Atropine sulfate was administered orally at a dose of 0.02 mg/kg/dose 8 times a day before feeding. Oral feeding was started at a rate of 10 ml/kg/day every 3 hourly and increased stepwise till full volume tolerated without vomiting. Discharge criteria were vomiting reduced to 1 episode every 12 hours on full feed. Treatment was considered unsuccessful if patients failed to tolerate 50 ml/kg/day within 7 days. Atropine was continued at the same dose for 1 week after cessation of vomiting and then tapered by 25% every 1 week. Successfully treated patients were followed up clinically for physical development at the end of treatment, 3 months, 6 months, 9 months and 1 year. Ultrasonographic evaluation of the pylorus was done for thickness of the pyloric muscle and the length of the pyloric canal in every patient at the end of treatment and at 1 year of age.

Results: 25 patients (89.3%) enrolled in the study were responded to oral atropine therapy. Mean hospital stay was 10.2 (4-19) days and total mean duration of oral atropine therapy in all patients was 60.6 (47-84) days. Mean weight gain per day prior to diagnosis was 19.83 (±3.39) grams which significantly ($p<0.001$) increased to 33.83 (±7.26) grams during atropine treatment. Weight gain from 3 to 6 months and 6 months to 1 year were 21.73 (±2.97) and 14.72 (±3.42) gram per day. Mean pyloric muscle thickness decreased from 5.25 (4-8) mm at presentation to 3.64 (2-5) mm at completion of oral atropine and 2.67(1-5) mm at 1 year of age, both of which were significantly (<0.001) less than that at presentation. Mean pyloric canal length decreased from 20.86 (16-28) mm at presentation to 16.48 (12-23) mm at completion of oral atropine and 13.64 (8-18) mm at 1 year of age, both of which were significantly ($p < 0.01$) less than that at presentation.

Conclusion: Oral atropine therapy is effective in decreasing vomiting and improving pyloric muscle thickness and pyloric canal length in IHPS.

ahmar_shamim@yahoo.com