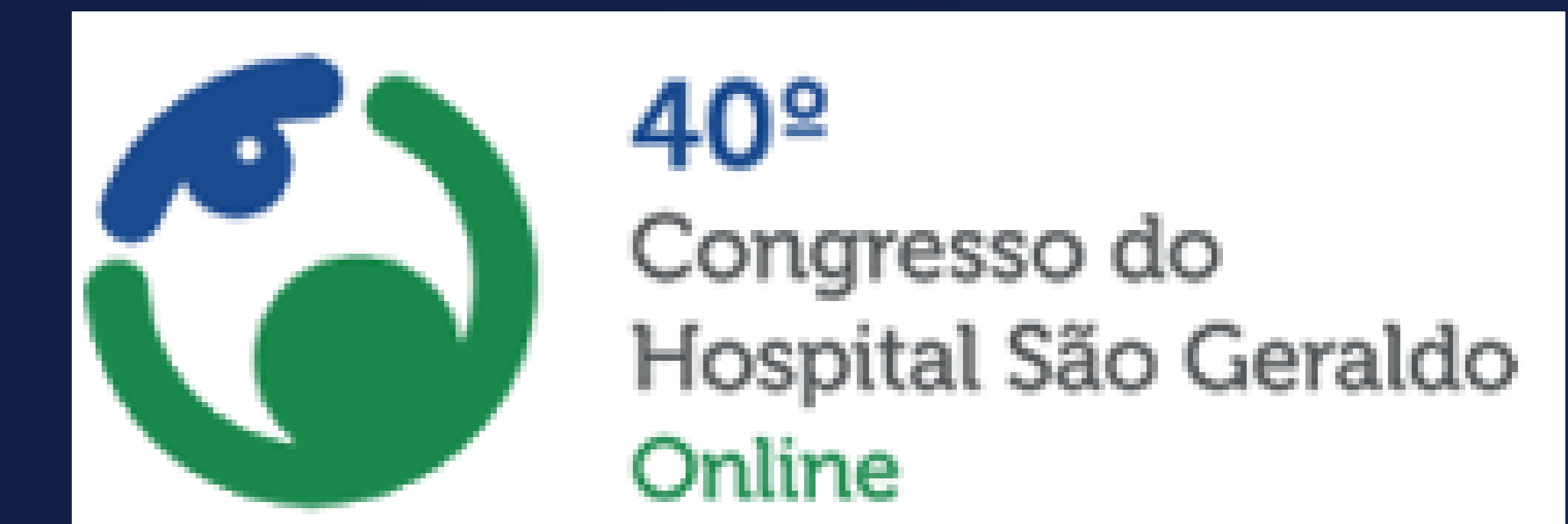




EFFICACY OF PROBING FOR CONGENITAL NASOLACRIMAL DUCT OBSTRUCTION IN A PRIVATE TERTIARY HOSPITAL: 10 - YEAR EXPERIENCE

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PURPOSE

To evaluate the success rate of initial and repeated probing as treatment approach for congenital nasolacrimal duct obstruction (CNLDO) in children between 2 and 46 months.

METHODS

A retrospective review of 73 children diagnosed with CNLDO who underwent probing of the NLD from March 2010 to 2020 was conducted. Data were collected from Hospital Oftalmológico de Anápolis in Anápolis, Goiás.

RESULTS

The procedure was performed in 90 eyes. The study sample was constituted of 36 males and 37 females. Bilateral involvement occurred in 18 (24.6%) children whereas 55 (75.3%) of them were unilaterally affected. The age ranges of the patients were divided into 4 groups: A - up to 6 months old (5.5% of the eyes), B-7 to 12 months (27.5%), group C-13 to 24 months (39.5%) and group D-older than 24 months (26.4%). The mean age of the sample was 18.6 months. Initial probing obtained an overall success rate of 88.8% and group B showed the best percentage (96%) from all age ranges. The second intervention had a lower outcome, successfully in 55.5% of the cases.

TABLES

EPIDEMIOLOGICAL DATA		
TOTAL NUMBER OF CHILDREN	73	100%
FEMALE	36	50.7%
MALE	37	49.3%
AVERAGE AGE OF CHILDREN 18.6 MONTHS		
TOTAL NUMBER OF EYES	90	100%
RIGHT EYE	51	56.6%
LEFT EYE	39	43.4%
NUMBER OF EYES BY AGE	90	100%
GROUP A (<6M)	5	5.5%
GROUP B (6-12M)	25	27.5%
GROUP C (13-24M)	26	39.5%
GROUP D (> 24M)	24	26.4%

Table 1: epidemiological data

GENERAL SUCCESS RATE		
FIRST APPROACH	80/90	88.8%
SECOND APPROACH*	5/9	55.5%
SUCCESS RATE BY AGE		
FIRST APPROACH		
GROUP A (<6M)	4/5	80%
GROUP B (6-12M)	24/25	96%
GROUP C (13-24M)	31/36	86.1%
GROUP D (> 24M)	21/24	87.5%
SECOND APPROACH		
GROUP A (<6M)	0/1	0%
GROUP B (6-12M)	1/1	100%
GROUP C (13-24M)	3/5	60%
GROUP D (> 24M)	1/2	50%

*Of the 10 patients without success in the first approach, only 9 patients realized a second approach.

Table 2: general success rate and success rate by age

PROCEDURES		
FIRST APPROACH		
PROBE WITHOUT TUBE	83/90	92.3%
PROBE WITH TUBE	7/90	7.77%
SECOND APPROACH		
PROBE WITHOUT TUBE	8/9	88.8%
PROBE WITH TUBE	1/9	11.2%

Table 3: procedures

CONCLUSION

All age ranges showed high success rates for initial probing, although there was a decrease in subsequent procedures outcomes. Our results demonstrate that the success rate for primary probing is not affected by age.

KEYWORDS

Congenital nasolacrimal duct obstruction; probing, nasolacrimal duct obstruction, primary probing.

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