

Nine-Month Follow-up Results of Treatment for Nasolacrimal Duct Obstruction by Probing with Adjunctive Mitomycin C in Adults: A Prospective Randomized Placebo-Controlled Trial.

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Abstract

The current study aimed to determine the efficacy of probing with adjunctive mitomycin C (MMC) as a treatment for nasolacrimal duct obstruction (NLDO) in adults and to study the association of probing success with demographic and obstruction characteristics. This was a prospective, randomized, double-blind, placebo-controlled trial including 140 patients (each with a unilateral NLDO) scheduled for nasolacrimal probing who were randomly assigned to receive MMC (0.2 mg/ml, 70 patients; group A) or placebo (normal saline, 70 patients; group B). Irrigation was carried out with 0.5 cc of MMC (0.2 mg/mL) in the duct with a nasal pack for 10 minutes in group A. Patients' postprobing epiphora was evaluated at 2 weeks and 1, 3, 6, and 9 months postoperatively. Probing was judged to be a success if there was no or mild watering for at least 9 months after the procedure. There were no significant differences between the two study groups in demographic characteristics or duration of the operation ($p=0.062$). The overall success rate of probing with MMC was 47/70 (67.1%), which was significantly higher than the success rate of the procedure with placebo ($p=0.0027$). When the sex of the patients was controlled for by logistic regression, a significant association between the failure rate of probing and increasing age was found in cases and controls ($p=0.004$ vs. $p=0.006$, respectively). No significant side effects of probing with MMC were noted after 9 months of follow-up. Administering MMC in a dosage of 0.2 mg/mL during nasolacrimal probing significantly increased the success rate of probing. The failure rate of probing increased with age. A low dose of MMC is cheap, safe, and easily accessible; thus, it is recommended during nasolacrimal probing, especially in patients who refuse dacryocystorhinostomy surgery.

KEYWORDS:

Adult; Lacrimal duct obstruction; Mitomycin