

TITLE

**Study to compare the results of
Single and Double Flap techniques
in External Dacrocystorhinostomy**



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INTRODUCTION

- ▶ Chronic dacrocystitis- is inflammation of the lacrimal sac, most commonly associated with complete obstruction of nasolacrimal duct.
- ▶ Affects all age groups.
- ▶ Usually present with watering, epiphora and discharge; there may be swelling at the site of sac, mucocele



- ▶ Surgery is the treatment of choice. Surgical procedure is chosen depending on age , cause and site of obstruction.
- ▶ External DACROCYSTORRHINOSTOMY, 1st described by ADDEO TOTIS is still the gold standard procedure for nasolacrimal duct obstruction
- ▶ External dacrocystorhinostomy (DCR), involves fistulization of lacrimal sac into nasal cavity and alleviates the symptoms.



- ▶ DCR, is an operation whereby the lacrimal sac is drained into the nose via a bypass conduit called ostium or rhinostomy as opening is made in lacrimal fossa and ascending process of the maxilla , which is lined with lacrimal sac and nasal mucosa.
- ▶ 2 types
 - Single Flap technique
 - Double Flap technique



AIMS AND OBJECTIVES:

- ▶ To evaluate and compare the surgical outcome in double flap and single flap techniques in external dacrocystorhinostomy in terms of lacrimal patency and mean operative time taken.



MATERIAL AND METHODS:

SOURCE OF DATA:

This study was carried out in the Department of ophthalmology, GGH, Kadapa. A total of 30 diagnosed cases of chronic dacrocystitis attended ophthalmology out-patient department at GGH, Kadapa were included in the study.



INCLUSION CRITERIA-

- ▶ 30 patients diagnosed with chronic dacrocystitis having more than 4 years of age and below 60 years.

▶ EXCLUSION CRITERIA-

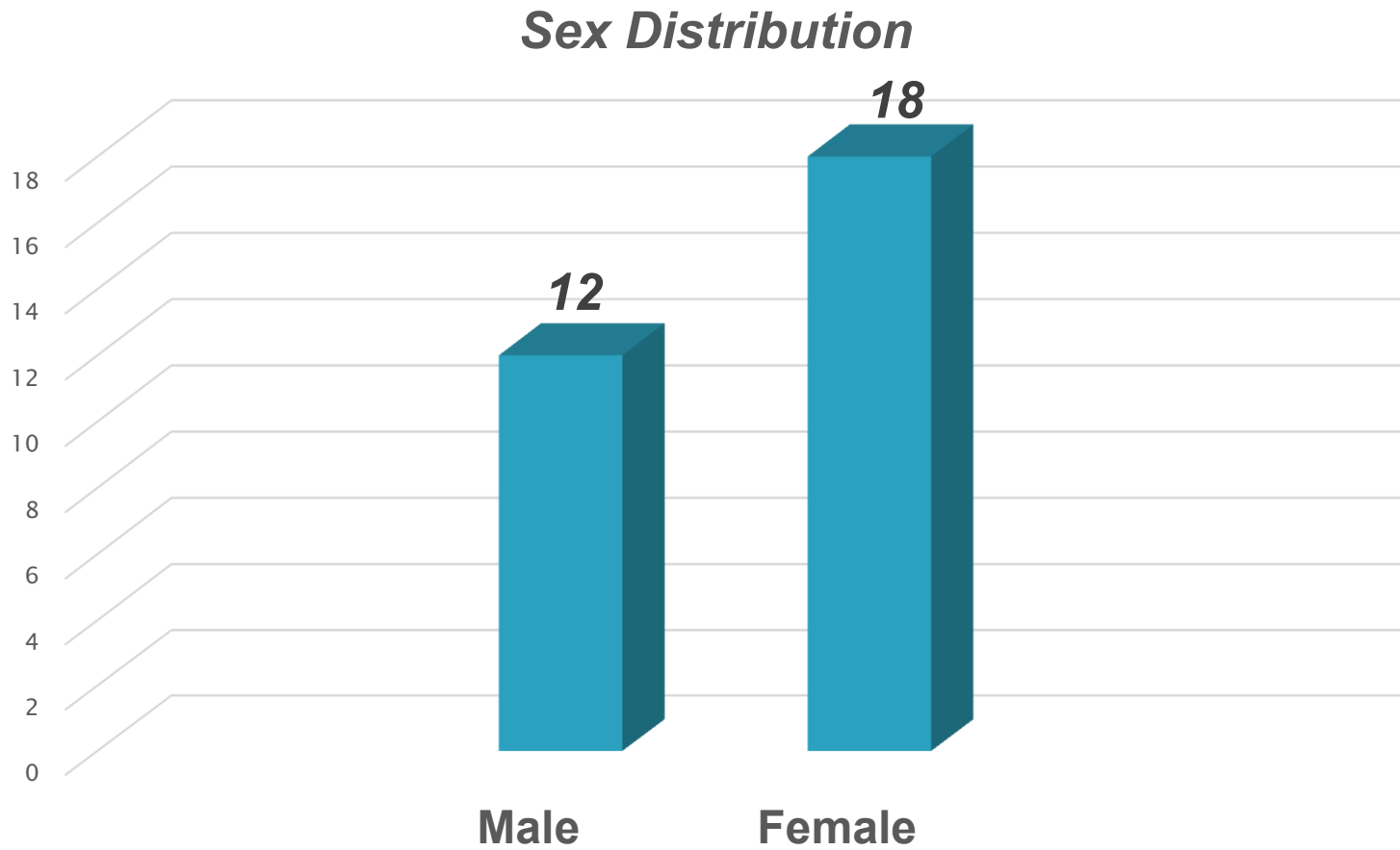
1. Too young (less than 4 years of age) or too old (more than 60 years of age).
2. Markedly shrunken and fibrotic sac.
3. Tumours of sac.
4. Granulomatous conditions of sac like Tuberculosis, Syphilis, Leprosy, Sarcoidosis or mycotic infections of sac.
5. Nasal conditions like severe DNS and atrophic rhinitis.



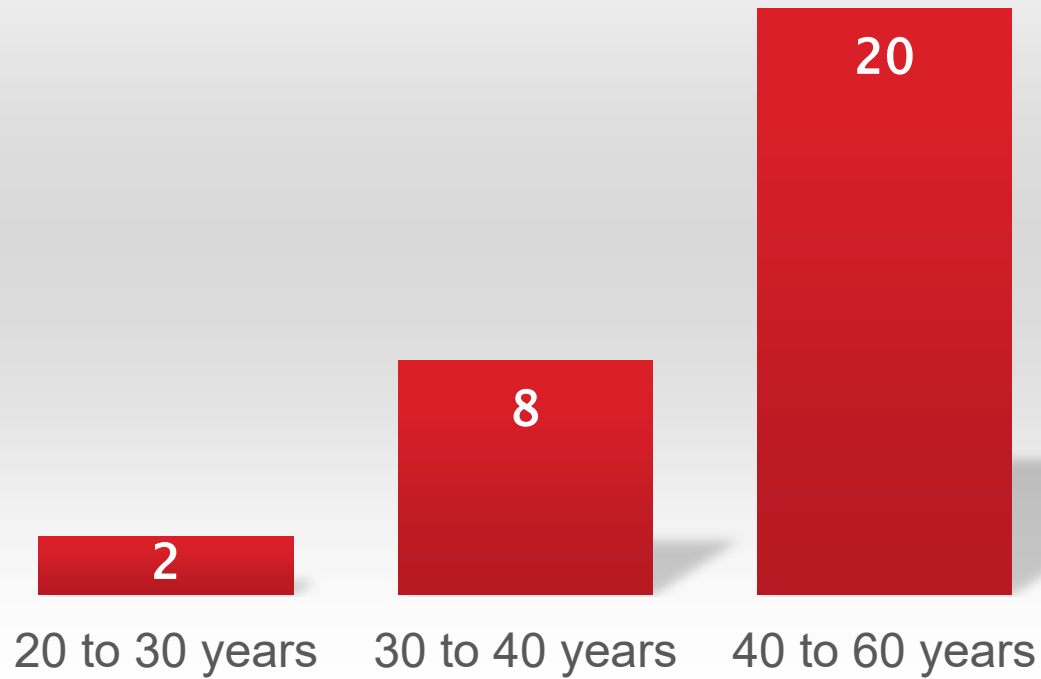
- ▶ DURATION OF THE STUDY:
8 months - From November 2020 to June 2021
- ▶ Sample size: 30
- ▶ Study design: prospective, cross sectional, comparative study



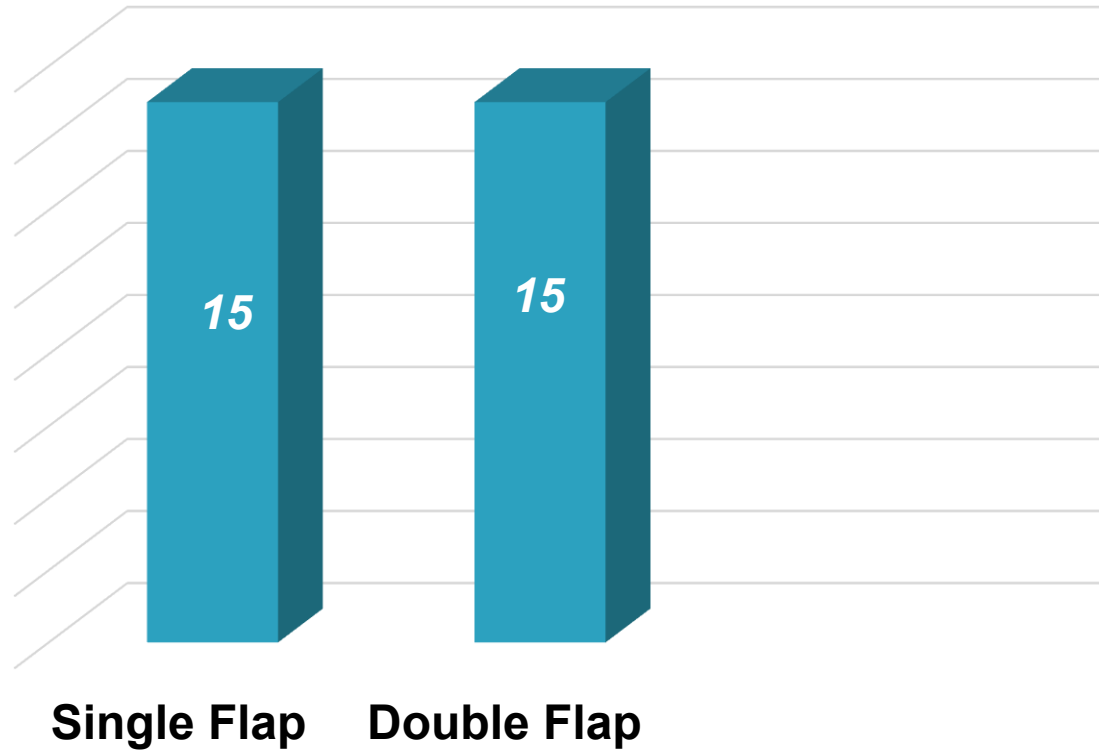
RESULTS AND OBSERVATION:



Age Distribution



Technique Used for 30 patients



Discussion

- ▶ 30 patients diagnosed with chronic dacrocystitis were included in the study after applying the selection criteria.

- ▶ PREOPERATIVE EVALUATION:
 - All the selected patients are subjected to detailed history of presenting illness with standard interview on medical history.
 - Enquire about drug history (pilocarpine , epinephrine , echothiophate iodide which cause lacrimal obstruction),history of radiotherapy and ocular examination.
 - Lacrimal passage irrigation tests are performed.
 - The patients are informed about the procedures, all the possible outcomes and complications.



- ▶ Patients are evaluated by the otorhinologists and their advice taken regarding the condition of the nasal cavity and nasal mucosa.
- ▶ General examination and vitals measurement.
- ▶ Visual acuity using snellen's chart.
- ▶ Comprehensive eye examination of anterior and posterior segment done



- ▶ Investigations:
 - Complete Hemogram
 - Fasting and post prandial blood glucose
 - Serum HIV, HBSAG
 - Bleeding time, Clotting time
 - Swab for culture and sensitivity.

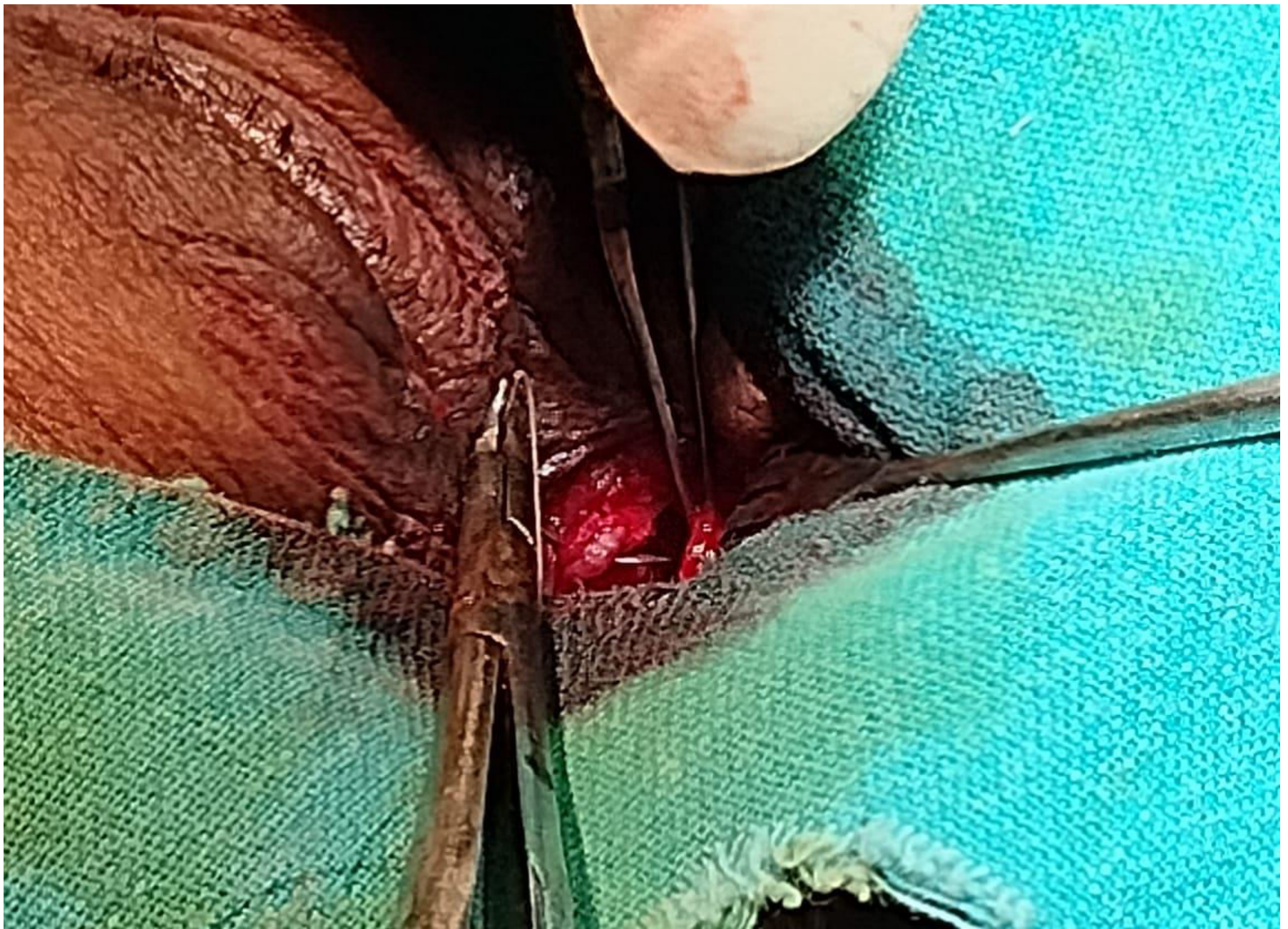
- ▶ Out of 30 patients, 15 underwent single flap technique and another 15 underwent double flap technique external DCR under local anaesthesia.

- ▶ patency is tested on post operative day 1 and discharged with instructions like not to blow nose, and not to lift heavy weights which induce bleeding.



- ▶ At follow up after 1 week , patency is tested with syringing and suture removal done.
- ▶ At 1month follow up, nasal endoscopy is done to rule out presence of any synichae.
- ▶ In a successful DCR , the patient is symptom free and patency on syringing seen.
- ▶ Surgical outcome in both the patient groups who underwent two different techniques was same in terms of anatomical patency.
- ▶ Time taken for single flap technique is less compared to double flap technique of external DCR







- ▶ CONCLUSION:
- ▶ Both single and double flap techniques of external Dacrocystorhinostomy are equally effective in the treatment of chronic dacrocystitis.
- ▶ Operative time taken for single flap technique is less compared to double flap external dacrocystorhinostomy.



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THANK YOU