CLINICOMICROBIOLOGICAL STUDY OF CHRONIC DACRYOCYSTITIS

Thesis

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Chronic dacryocystitis is an inflammatory condition of the lacrimal sac commonly associated with partial and total obstruction of the nasolacrimal duct, which affects patients of every age more commonly occurring in women than in men. It is most often unilateral . In addition to the irritation and
discomfort caused by this disease, it may sometimes also be sight threatening. The main symptoms are chronic discharge, lacrimal sac distension and even abscess. The treatment of chronic dacryocystitis is by either external or endonasal dacryocystorhinostomy (DCR), and less commonly by lacrimal silicon intubation. Chronic dacryocystitis should be surgically treated before intraocular surgery is performed.

And up-to-date knowledge of the spectrum of causative bacteria and their sensitivities is a valuable asset in the treatment of this disease, and contributes significantly to postoperative recovery following surgery.

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List of Abbreviations

A.	Aspergillus
AFB	Acid fast bacilli
BCG	Bacilli Calmette-Guerin vaccination
C.	Candida
CA-MRSA	Community Associated Methicillin Resistant Staphylococcus aureus.
CDCR	Canaliculo-Dacryo-Cysto-Rhinostomy
CLSI	Clinical and laboratory Standard Institute.
CoNS	Coagulase negative Staphylococci.
CT	Computerized Tomography
DCR	Dacryocystorhinostomy
D.M	Diabetes Mellitus
DNA	Deoxyribonucleic acid
DNAse agar	Deoxyribonucleic agar
E. COLI	Escherichia Coli
ELISA	Enzyme-linked Immunoassay
ENT	Ear , Nose and Throat
FDA	Food and Drug Administration
FTA-ABS	Fluorescent Treponemal Antibody Absorbed test
H.	Haemophilus
HD	Hansen´s disease

HIV	Human Immune Deficiency Virus
HTN	Hypertension
IG	Immunoglobulin
ID	Identification
IFN-g	Inteferon gamma
LTBI	Latent tubercolosis infection
M.	Mycobacterium
MHA-TP	Microhemagglutination assay for Treponema pallidum
MIC.	Minimal inhibitory concentration.
MPL	Medial palpepral ligament
MRSA	Methicillin Resistant Staphylococcus aureus
NLD	Nasolacrimal duct
NLDO	Nasolacrimal duct obstructin
PCR	Polymerase chain reaction
QFT-G	Quantiferon TB Gold test
R	Resistant
RPR	Rapid Plasminogen Reagent
S.	Sensitive
SPP.	Species
Staph.	Staphylococcus
S. aureus	Staphylococcus aureus
S.epidermidis	Staphylococcus epidermidis
S.pneumoniae	Streptooccus pneumoniae

TB	Tuberculosis
TST	Tuberculin skin test
VDRL	Venereal disease research laboratory
WB	Western Blot assay
WBC	White blood cell

Introduction

Dacryocystitis is the inflamation of the lacrimal sac, characterised clinically by epiphora and regurgitation of pus or mucopus through the punctum on pressure over the sac and caused frequently by bacteria . Nasolacrimal duct obstruction convert the lacrimal sac into a stagnant pool which become easily infected, leading to chronic dacryocystitis. Bacteriological analysis of chronic dacryocystits has been gaining importance to prevent the vision threatening complication like endophthalmitis, hypopyon and corneal ulcer after intra-ocular operation like cataract surgery and glaucoma filtration surgery **(Mandal et al., 2008).**

The predisposing factors of chronic dacryocystitis are recurrent or chronic unilateral conjunctivitis, previous acute dacryocystitis, chronic nasolacrimal duct obstruction, facial fracture and foreign bodies (e.g. punctual or canalicular plug) **(Sun et al., 2005).**