SDM
College of Dental Sciences & Hospital
Dhavalnagar, Sattur, Dharwad - 580009, Karnataka, INDIA
Recognised by Dental Council of India, New Delhi

SHRI
DHARMASTHALA
MANJUNATHESHWARA
UNIVERSITY

SHRI DHARMASTHALA MANJUNATHESHWARA UNIVERSITY,

DHARWAD, KARNATAKA

A COMPARITIVE STUDY BETWEEN CYSTIC ENUCLEATION AND CHEMICAL CAUTERIZATION V/S DISTRACTION SUGOSTEOGENESIS IN TREATMENT OF ODONTOGENIC CYSTS

By

Dr. MEGHANA .S. PATIL

Dissertation Submitted to the

Shri Dharmasthala Manjunatheshwara University, Dharwad, Karnataka,

In partial fulfilment

of the requirements for the degree of

MDS

in

ORAL AND MAXILLOFACIAL SURGERY

Under the guidance of

Dr. KIRAN RADDER

DEPARTMENT OF ORAL AND MAXILLOFACIAL SURGERY

SDM COLLEGE OF DENTAL SCIENCES AND HOSPITAL

DHARWAD

2021- 2024

ABSTRACT

INTRODUCTION- Cysts developing from the remnants of the odontogenic apparatus within the jaws are known as odontogenic cysts. Treatment options include cystectomy, marsupialization, or decompression of the cyst. The aim is to compare between conventional cystic enucleation & chemical cauterization technique with the active decompression and distraction sugosteogenesis (ADDS) in terms of reduced cystic size & bone formation during the treatment.

METHODS- The study includes 60 patients with age 18years & above with ASA-1, diagnosed with odontogenic cyst . 30 were treated with ADDS technique where active negative pressure is created by placing vacuum drain EVOCYST- a handcrafted device for creating active negative pressure within the cyst.

30 more were treated with conservative technique of cystic enucleation and chemical cauterization . We recorded the rate of bone formation and healing, patient's medical history, demographics, cyst radiographic features, technique/device used, complications, and success rate.

RESULTS- The average age being 25 year and 40% of them are OKC with average cystic size of 5mm x 5mm mainly involving the left posterior mandible of 44% . Active decompression was done average 25 days(25-35) results showed high rate of bone formation with average 19% in first 2 weeks, followed with 37.28% to 53.18% and 91.52% in 3^{rd} ,6^{th} and 9^{th} months in ADDS compared to conventional follow up . no

recurrences documented yet. Complications like drain dislodgement (3) and fistula (1) noted.

CONCLUSION- Active decompression and distraction sugosteogenesis helps in faster bone regeneration when compared to the conventional method in treatment of unilateral odontogenic cyst and is cost effective and non -invasive technique

KEYWORDS- Odontogenic cysts; Active decompression and distraction sugosteogenesis; Active Negative Pressure; Evocyst; custom-made drain; Decompression; cystic enucleation;

TABLE OF CONTENTS