

بسم الله الرحمن الرحيم



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شبكة المعلومات الجامعية التوثيق الالكتروني والميكرونيلم





جامعة عين شمس

التوثيق الإلكتروني والميكروفيلم

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The Effect of Perioperative Lumbar Drains in CSF Rhinorrhea after Endoscopic Repair

Meta-Analysis Study

Submitted in Partial Fulfillment for Master Degree of **Otorhinolaryngology**

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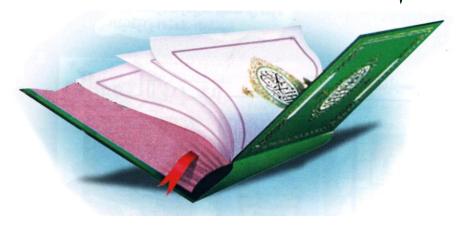
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بسم الله الرحمن الرحيم

وَقُلِ اعْمَلُواْ فَسَيَرَى اللهُ عَمَلُواْ فَسَيَرَى اللهُ عَمَلَكُمْ وَرَسُولُهُ وَالْمُؤْمِثُونَ عَمَلَكُمْ وَرَسُولُهُ وَالْمُؤْمِثُونَ



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List of Contents

Title Page No.
List of Tables
List of Figuresii
List of Abbreviationsiv
Introduction
Aim of the Work
Review of Literature
• Functional Anatomy
• CSF Physiology & Principles of Diversion
■ Technique of Endoscopic Repair of CSF Rhinorrhea 23
■ Diagnosis of CSF Rhinohrrea
 Use of Lumbar Drain In Endoscopic Skull Base Surgery 36
■ Benefits of Lumbar Drains
• Complications of Lumbar Drains
Patients and Methods 50
Results 55
Discussion
Conclusion
Recommendations
Summary
References
Arabic Summary

List of Tables

Table No	. Title	Page No.
Table (1):	Example of Included articles:	52
Table (2):	Excluded articles & causes of exclusion	on:53
Table (3):	Shows male/female ratio	55
Table (4):	Mean follow up in months	56
Table (5):	Comparison of success of repair patient with L.D & without L.D	
Table (6):	Succes of repair in relation to the etic	ology.
Table (7)	All articles included in the study	59&45
Table (8):	L.D induced complications	46

List of Figures

Fig. No.	Title	Page No.
Figure (1):	Endoscopic endonasal wide exposur anterior, middle, and posterior skul	
Figure (2):	Endoscopic endonasal anatomical the anterior skull base	
Figure (3):	Endoscopic endonasal anatomical the olfactory groove	
Figure (4):	CSF pathway	21
Figure (5):	Illustration of technique of energiar of CSF leak in patient cribriform defect	s with
Figure (6):	Illustration of supraorbital sinusotomy	
Figure (7):	A CT scan showing fracture of the base (arrow), one of the most cause of the CSF leakage	common
Figure (8):	(A) T1-weighted sagittal MRI shot large anterior skull base meningion T1-weighted coronal MRI of the skull base meningiona. (c) Intraoj image of the large angled skull base (d) Postoperative MRI after coremoval of the tumor and enpedicled nasoseptal flap (arrow)	oma. (b) anterior perative e defect. omplete hancing
Figure (9):	Intrathecal fluorescein utilize visualization during repair of posterior ethmoid encephalocel Septum (S), Sphenoid os (arrow)	a left e (E).
Figure (10):	Shows male / female ratio	56

List of Figures cont...

Fig. No.	Title	Page No.
Figure (11):	Comparison of success of repair patient with L.D & without L.D	
Figure (12):	Sucees of repair in relation etiolog	
	unnel plot of studies included in meta-ar line denotes 95% confidence intervals	
endoscopic cere (LD). "Events"	orest plot illustrating the odds ratios (Obrospinal fluid leak repair with and with represent number of successful repair	hout lumbar drain

List of Abbreviations

Abb.	Full term
2 <i>Trf</i>	. Beta2 transferrin.
3D-CISS	. Three - dimensional constructive interference in steady state
<i>CE-MRC</i>	. contrast-enhanced MRI cisternography
<i>CSF</i>	. Cerebrospinal fluid.
<i>IFE</i>	. immunofixation electrophoresis
L.D	. Lumbr drain.

ABSTRACT

Background: Cerebrospinal fluid (CSF) rhinorrhea results from an abnormal communication between the subarachnoid and sinonasal spaces. Surgical repair of CSF leaks that do not respond to conservative management is indicated to seal a potentially infectious conduit. The risk of ascending meningitis in the setting of anterior skull base defects has been reported to be 10% to 37%.

Aim of the Work: Is to evaluate the efficacy of perioperative lumbar drainage following endonasal endoscopic cerebrospinal fluid leak repair.

Patients and Methods: A meta-analysis examining the use of lumbar drains as an adjunct therapy to endonasal endoscopic repair of CSF leaks. Our study depends on examining only the existing peer-reviewed literature, from PubMed (1990 to November 2018). Search terms included: cerebrospinal fluid leak, cerebrospinal fluid rhinorrhea, lumbar drain, endoscopic repair. The Medical Subject Headings database— a-controlled vocabulary system used for indexing articles for MEDLINE—was used to maximize our search yield.

Results: Meta-analysis for efficacy of perioprative lumbar drain in cases of CSF rhinorrea following endoscopic repair was done using (20) studies with a total number of patients (1825) divided into (811) male & (879) female – not all studies are included with mean follow up (23.319) months. The results of these studies showed marked heterogeneity, so pooling of data was done with random effect model which showed a success rate of repair (estimated by recurrence of post operative leak) of 72.13% with lumbar drain & 90.08% without lumbar drain.

Conclusion: In a series of 20 studies which discussed endoscopic repair of anterior cranial fossa CSF rhinorrhea, there was no association identified in this review between placement of a lumbar drain and recurrence of the leak. This lack of influence on recurrence rate was observed whether the leak was highflow or low-flow, spontaneous, traumatic, or iatrogenic in origin..

Keywords: Perioperative Lumbar Drains, CSF Rhinorrhea, Endoscopic Repair.

Introduction