اهمية استعمال حشو الانف بعد عمليات تقويم الحاجز الانفى

رســـالة

توطئة **للحصول علي درجة الماجستير في جراحة الأذن والأنف والحنجرة**

مقدمة من

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Value of Nasal Packing After Septoplasty

Meta-Analysis Study

For partial fulfillment of Master degree in Otorhinolaryngology

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First thanks to **ALLAH** *to whom I relate any success in achieving any work in my life.*

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Finally I dedicate this work to the spirit of my grandfather who was always support and encourage me and I know also that his wish was to see me here.

Mohammed Abdel Rahman Abo Bakr


بسم الله الرحمن الرحيم
﴿قَالُوا سُبْحَانَكَ لاَ عِلْمَ لَنَا
إِلاَّ مَا عَلَّمْتَنَا إِنَّكَ أَنتَ العَلِيمُ الحَكِيمُ﴾
صدق الله العظيم
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List of Abbreviations

GS	:Gauze Strips
PVA-NT	: Poly Vinyl Acetate – Netcell
CMC	: Carboxy Methyl Cellulose
HT	: Hämostatische Tamponaden
HA	: Hyaluronic Acid
PDGF	: Platelet Derived Growth Factor
TGF	: Transforming Growth Factor
TSS	: Toxic Shock Syndrome
IV	: Intra Venous
BC	: Before Christ

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INTRODUCTION

Man has considered the nose to be the key feature of facial appearance, beauty, and dynamics. However, because of its central facial location and weak cartilaginous support, the nose is susceptible to disfiguring infection, trauma and pathological insult ***(Belinfante, 2012).***

Septoplasty was first described by **Cottle** in 1947 as a treatment to correct nasal airway obstruction.

In 1991: **Lanza** described endoscopic techniques to correct septal deformities ***(Leena Jain et al., 2011)***

Rhinoplasty is one of the most interesting and complex aesthetic surgeries. Cosmetic rhinoplasty has great potential to change a patient's appearance through enhancing beauty by creating a harmonious natural looking face. It also carries the ver0y real risk of patient dissatisfaction and request for revision ***(Neaman, 2013).***

Along with facial aesthetic, rhinoplasty aims to improve the nasal breathing function by relieving nasal obstruction ***(Braccini, 2011).***

Trans septal suturing is not commonly used, since it takes time and is technically difficult ***(Korkut et al., 2010).***

Various types of packs have been used historically. Some examples of the common nasal packing materials include: self-expanding packs (MerocelR), hydrogel-coated packs (Rhino-ForceR), silastic coated foam packs (RhinotampsR) and absorbable gelatin (GelfoamR -Pfizer) ***(Banglawala et al., 2013).***

Nasal packing is routinely used after septoplasty because it is believed to: ensure stabilization of post-nasal septoplasty and to decrease risk of postoperative complications like: bleeding, hematomas, apposition of mucosal flaps, septal cartilage perforation and adhesions ***(Banglawala et al., 2013).***

However it is associated with many postoperative complications such as pain, hypoxia, dryness in throat, headache, epiphora, eustachian dysfunction, crusting, synaechiae, secondary infection, decreased sleep quality, respiratory problems, decreased oxygen saturation, circulatory system problems and toxic shock syndrome ***(Thapa and Pradhan, 2011).***

Therefore, alternatives to nasal packing were sought. **Lee and Vukovic**, described and performed suturing of the nasal septum after sptoplasty and achieved the purposes of nasal packing without causing discomfort for their patients, minimal complications and the outcome is almost the same***. (Daifallab and Al Raggad, 2007).***

The suturing technique used in septoplasty presents minimal pain, minimal discomfort and avoid complications of nasal packing. Patients return to normal daily life in a very short period of time. ***(Cukurovaet al., 2011).***

AIM OF THE WORK

The aim of this meta-analysis study is to investigate the utility of nasal packing after septoplasty and compare it with the trans septal suturing technique.

Chapter (1):

NASAL ANATOMY

Nasal anatomy can be subdivided into several categories including the skin-soft tissue envelope (S-STE), septum, lateral nasal walls, bony pyramid, cartilaginous vault, and nasal tip ***(Papel, 2002).***

Osteocartilaginous Framework:

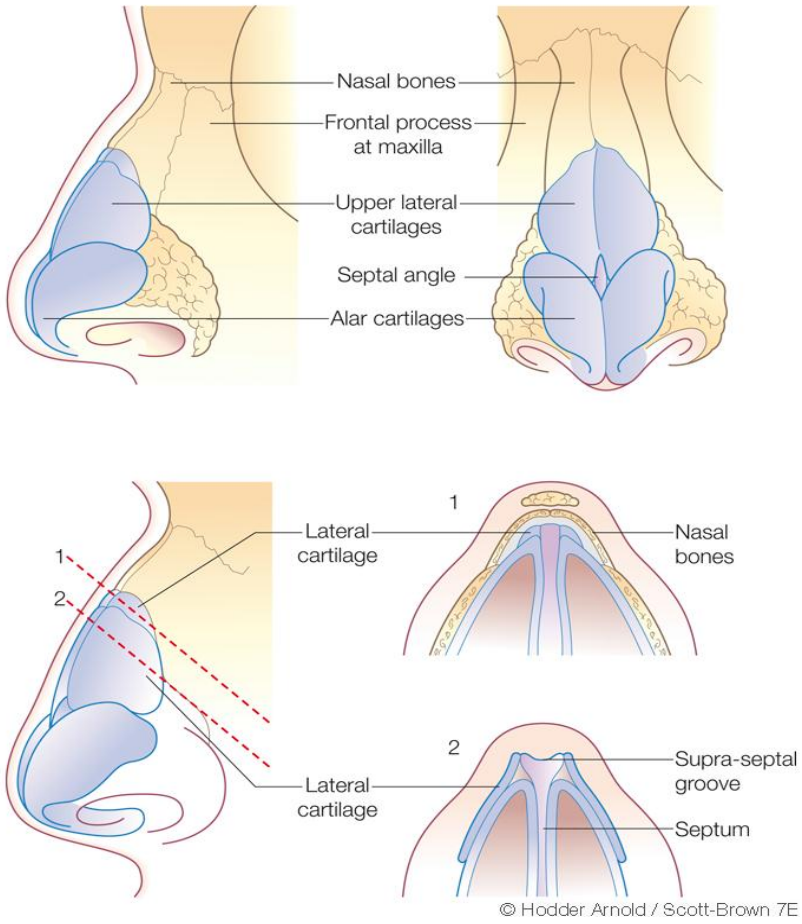

Fig. (1): The cartilaginous and bony septum of the nose ***(Han et al., 2004).***

Nasal Bones:

The nasal bones unite with each other in the midline, with the frontal bone superiorly at the nasofrontal suture and laterally with the frontal process of the maxilla at the nasolacrimal suture ***(Lang, 1989).***

They are supported by the nasal spine of the frontal bone and by the perpendicular plate of the ethmoid, both of which groove the bones. The nasal bone is wedge-shaped, usually convex and smooth on its outer surface and concave and roughened internally. The bones are grooved by adjacent neurovascular bundles. There is considerable ethnic and individual variation in the shape and size of the nasal bones ***(Papel, 2002).***

Cartilages of the external nose and columella:

The nasal cartilages are composed of hyaline cartilage which may be ossified. They prevent collapse of the vestibule on inspiration. The upper cartilages are triangular flat expansions lying inferior to the nasal bones and are overlapped by them, by the adjacent frontal processes of the maxillae and by the lower lateral cartilages ***(Oneal et al., 1999).***

The groove between the upper and lower lateral cartilages is known as the limen nasi, which is the site of intercartilaginous incisions.

Sesamoid cartilages are found between the upper and lower lateral cartilages and the part of the septum running between the tip of the nose and philtrum is called the columella. It bounds the anterior nares medially and is thicker posteriorly because of the contribution made by the medial crura of the lower lateral cartilages ***(Han et al., 2004).***

NASAL SEPTUM

1- Bony Part of the septum:

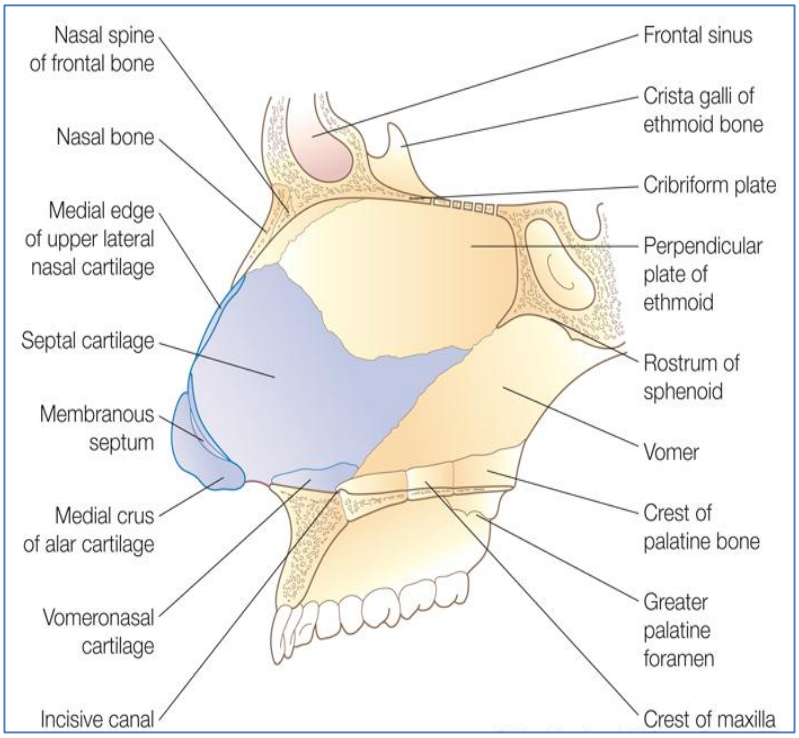

Fig. (2): The cartilaginous and bony septum of the nose ***(Han et al., 2004).***

a) The perpendicular plate:

Forms the superior and anterior bony septum, is continuous above with the cribriform plate and crista galli and abuts a variable amount of the nasal bones ***(Papel, 2002).***

b) The vomer:

Forms the posterior and inferior nasal septum and articulates by its two alae with the rostrum of the sphenoid, thereby creating the vomerovaginal canals which transmit the pharyngeal branches of the maxillary artery ***(Loosen et al., 1988).***