

# بسم الله الرحمن الرحيم





# شبكة المعلومات الجامعية التوثيق الالكتروني والميكروفيلم



# جامعة عين شمس

التوثيق الإلكتروني والميكروفيلم

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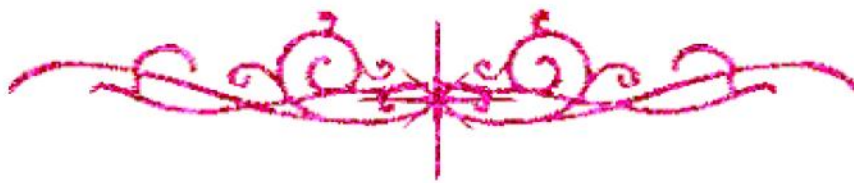
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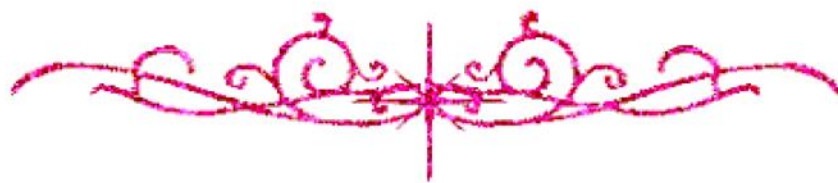


# بعض الوثائق الأصلية تالفة





بالرسالة صفحات  
لم ترد بالأصل



# **Validation of Bench Training Model for Cleft Palate Surgery**

Thesis

*Submitted for Partial Fulfillment of Master's degree in  
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بِسْمِ اللَّهِ الرَّحْمَنِ الرَّحِيمِ

قالوا

سببنا انك لا تعلم لنا  
إلا ما علمتنا إنك أنت  
العليم العظيم

صدق الله العظيم

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## *List of Abbreviations*

<b>Abb.</b>	<b>Full term</b>
<i>3D</i> .....	<i>Three - Dimensional</i>
<i>CL</i> .....	<i>Cleft Lip</i>
<i>GRITS</i> .....	<i>Global Rating index for Technical Skills</i>
<i>iCP</i> .....	<i>Isolated Cleft Palate</i>
<i>NAM</i> .....	<i>Nasoalveolar Molding</i>
<i>RS</i> .....	<i>Robin Sequence</i>
<i>SD</i> .....	<i>Standard Deviation</i>
<i>SPSS</i> .....	<i>Statistical Package for Social Sciences</i>
<i>VPS</i> .....	<i>Velopharyngeal Sphincter</i>

# INTRODUCTION

Cleft palate is one of the most common congenital malformations worldwide. It can be non-syndromic or it can appear as a part of a syndrome (*Hopper et al., 2007*).

Cleft palate surgery is difficult for surgeons as a result of the following unique features: working in a small cavity, limited access, poor visualization, delicate tissue handling, muscle dissection, suturing in depth and simultaneous access required by the surgeon and the assistant (*Denadai et al., 2012*).

The most common presentation is unilateral cleft lip and palate (46%), followed by isolated cleft palate (33%). Cleft palate occurs more in females (57%) than in males (43%) (*Hopper, 2007*).

The residency system provides skill acquisition by the surgical trainee through a one-on-one teaching situation on a real patient (*Doyle et al., 2007*).

Aspiring surgeons have traditionally been introduced to their craft in the operating theatre. Firstly, the trainee helps the trainer and observes the procedures. Then gradually the trainee assumes the role of operator under supervision of the senior surgeon until sufficient skill and confidence have been developed to operate independently. Eventually, the trainees teach the procedure to their junior colleagues in similar fashion (*Reznick and MacRae, 2006*).