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شبكة المعلومات الجامعية التوثيق الالكتروني والميكروفيلم



جامعة عين شمس

التوثيق الإلكتروني والميكروفيلم

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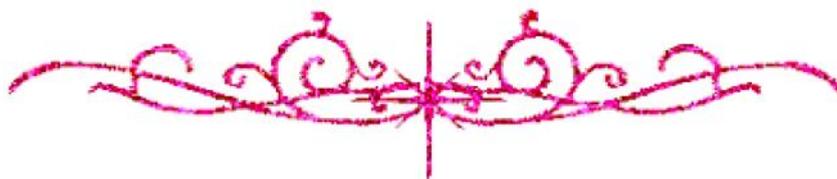


بعض الوثائق الأصلية تالفة





بالرسالة صفحات لم ترد بالأصل





**The effect of Hyoscine Butylbromide on
the rate of vaginal delivery in cases of
secondary arrest of cervical dilatation: A
Randomized Controlled clinical Trial**

Thesis

*Submitted for Partial Fulfillment of Master Degree
in Obstetrics & Gynecology*

By

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قالوا

لسبحانك لا علم لنا
إلا ما علمتنا إنك أنت
العليم العظيم

صدق الله العظيم

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List of Abbreviations

Abb.	Full term
<i>ACOG</i>	<i>American College of Obstetrics and Gynecology</i>
<i>ACTH</i>	<i>Adrenocorticotropic hormone</i>
<i>BMI</i>	<i>Body mass index</i>
<i>COX-2</i>	<i>Cyclooxygenase</i>
<i>CPD</i>	<i>Cephalopelvic disproportion</i>
<i>CRH</i>	<i>Corticotropin-releasing hormone</i>
<i>CS</i>	<i>Caesarean section</i>
<i>DHEAS</i>	<i>Dehydroepiandrosterone</i>
<i>FHR</i>	<i>Fatal heart rate</i>
<i>GI</i>	<i>Gastrointestinal</i>
<i>HBB</i>	<i>Hyoscine-N-Butylbromide</i>
<i>IM</i>	<i>Intramuscular</i>
<i>IV</i>	<i>Intravascular</i>
<i>IOL</i>	<i>Induction of labor</i>
<i>LUS</i>	<i>Lower uterine segment</i>
<i>MD</i>	<i>Mean difference</i>
<i>MMR</i>	<i>Maternal mortality rate</i>
<i>PGF2</i>	<i>Prostaglandin F2alpha</i>
<i>PGE2</i>	<i>Prostaglandin E2</i>
<i>PPH</i>	<i>Postpartum hemorrhage</i>
<i>PROM</i>	<i>Premature rupture of membrane</i>
<i>ROM</i>	<i>Rupture of membrane</i>
<i>VD</i>	<i>Vaginal delivery</i>
<i>WHO</i>	<i>World Health Organization</i>

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INTRODUCTION

Parturition can be divided into four overlapping phases that correspond to the major physiological transitions of the myometrium and cervix during pregnancy (*Word et al., 2007*).

These phases of parturition include (1) a prelude to it,(2) the preparation for it,(3) the process itself, and (4) recovery (*Cunningham et al., 2014*).

The first stage begins when spaced uterine contractions of sufficient frequency, intensity, and duration are attained to bring about cervical thinning or effacement. This labor stage ends when the cervix is fully dilated – about 10 cm – to allow passage of the term-sized fetus. The first stage of labor, therefor, is the stage of cervical effacement and dilatation (*Cunningham et al., 2014*).

The progress of labor in nulliparous has particular significance because curves reveal a rapid change in the slope of cervical dilatation rates between 3 and 5 cm. Thus, cervical dilatation of 3-5 cm or more, in the presence of uterine contraction, can be taken to reliably represent the threshold for active labor (*Neal et al., 2010*).

The mean duration of active-phase labor in nulliparous was 4.9 h. But the standard deviation of 3.4 h. is large, hence,

the active phase was reported to have a statistical maximum of 11.7 h (*Neal et al., 2010*).

Indeed, rates of cervical dilatation ranged from a minimum of 1.2 up to 6.8 cm/h. The ideal management of labor and delivery requires two potentially opposing viewpoints on the part of clinicians. First, birthing should be recognized as a normal physiological process that most women experience without complications. Second, intrapartum complications, often arising quickly and unexpectedly, should be anticipated (*Cunningham et al., 2014*).

Labor is divided into a latent phase, which should last no longer than 8h, and an active phase. The active phase starts at 3cm dilatation, and progress should be no slower than 1cm/h. A 4-h wait is recommended before intervention when the active phase is slow (*Orji 2008*).

Standardized labor management protocol reduced the number of caesarean deliveries for dystocia. Their overall caesarean delivery rate was 5% in 1970s and 1980s with such management (*Kalyani 2013*).

The approach is now referred to as active management of labor. Two of its components – amniotomy and oxytocin – have been widely used.

Oxytocin has amino acid homology similar to arginine vasopressin. Because of this, it has significant antidiuretic

action, and when infused at doses of 20 mU/min or more, renal-free water clearance decreases markedly. If aqueous fluids are infused in appreciable amounts along with oxytocin, water intoxication can lead to convulsions, coma, and even death (*Cunningham et al., 2014*).

The American College of obstetricians and Gynecologists recommends the use of amniotomy to enhance progress in active labor, but cautions that this may increase the risks of infection and maternal fever (*ACOG 2013*).

When necessary obstetricians use cervical ripening agents to decrease the duration of labor. Intravaginal misoprostol (prostaglandin E1analogue) and dinoprostone (prostaglandin E2) are the most commonly used agents for cervical ripening (*Norwitz et al., 2003*).

2ry arrest of cervical dilatation occur when there's no progress in cervical dilatation in active phase for 2 hours or more despite of adequate contractions (*Gifford et al., 2000*).

Hyoscine butylbromide belongs to the parasympatholytic group of drugs and is a semisynthetic derivative of scopolamine. It is an effective antispasmodic drug without the untoward side effects of atropine. Hyoscine butylbromide is a quaternary ammonium compound and has peripheral anticholinergic action, but no central action as it doesnot cross the blood-brain barrier(*Qahtani 2011*).