Impact of Scissors Type Used for Episiotomy on The Prevalence of Obstetric Anal Sphincter Injury: Randomised Controlled Trial

Thesis

Submitted for Partial Fulfillment of the Requirements Of Masters Degree in Obstetrics and Gynecology

By Amany Salah El Din Abd El Hafeez

M.B.B.Ch. (2012), Faculty of Medicine, Ain Shams University Resident of obstetrics and gynecology at El Sheikh Zayed Hospital

Under supervision of

Dr. Ahmed Husseiny Salama

Assistant Professor of Obstetrics and Gynecology Faculty of Medicine, Ain Shams University

Dr. Noha Abd El-Sattar Sakna

Lecturer of Obstetrics and Gynecology Faculty of Medicine, Ain Shams University

Dr. Mohamed Hamed Salama

Lecturer of Obstetrics and Gynecology Faculty of Medicine, Ain Shams University

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Tist of Abbreviations

| OASIS | Obstetric Anal Sphincter Injury |
|-------|-------------------------------------------|
| % | Percent |
| ml | Milliliter |
| cm | Centimeter |
| mg | Milligram |
| fig. | Figure |
| iv | Intravenous |
| RCOG | Royal college of obstetricsand gynecology |
| NICE | National Institute of clinical excellence |

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Dr. Mohamed Hamed Salama

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INTRODUCTION

Episiotomy is an incision of the perineum to enlarge the vaginal opening and facilitate delivery (Mullally et al., 2011). It shouldn't be done routinely in normal vaginal delivery but restrictive episiotomy is done in some situations as fetal distress and instrumental vaginal delivery (NICE guidelines 2015). It should be done at time of fetal head crowning (Rusavay et al., 2015).

Episiotomy types are median, mediolateral, lateral, J-shaped and anterior episiotomy. Mediolateral episiotomy is the most frequent type used which extends from midline laterally and downwards away from the rectum (Kalis et al., 2012). Median episiotomy has the advantage of less scarring, better cosmetic healing and less blood loss, while mediolateral episiotomy has less incidence of rectal injury (Goldman et al., 2003).

Mediolateral episiotomy angle should be between 45 and 60 degree to avoid perineal tears (**Lappen** *et al.*, **2010**). The angle of mediolateral incision is different at the time of incision from that after repair. The post incision angle of 60 and 40 degree is 40 and 22.5 degree respectively (**Kalis** *et al.*, **2008**).

Median episiotomy should be approximately one half the length of the perineum. Perineum is the distance from posterior forchette to middle of anal opening (Goldman *et al.*, 2003).

Different types of scissors have been used in cutting episiotomies such as straight, curved and angled scissors. It is thought that curved or angled scissors produce incision away from anal sphincter. However, Obstetric guidelines don't provide sufficient data on comparison of use of different scissors on episiotomy (Swift et al., 2014).

Episiotomy can be complicated by bleeding, pain, infection, dyspareunia, perineal tears and obstetric anal sphincter injuries (Sooklim et al., 2007).

Perineal tears occurring during vaginal delivery affect women's wellbeing (Necesalova *et al.*, 2016). Severe perineal tears may involve anal sphincter which may have comorbidities as perineal pain, rectovaginal fistula and anal incontinence (Harvey *et al.*, 2015).

Obstetric anal sphincter injuries (OASIS) is known to be a major risk factor for anal incontinence in women, leading to nine times increase in anal incontinence compared with men. Anal incontinence (ie, incontinence