A Comparative Study of Female Sexual Function before Pregnancy, First Sexual Activity Postpartum and One Year Postpartum with Respect to Mode of Delivery in Primiparae

Thesis

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List of Abbreviations

Abbrev.	Full-term
ANOVA	: A one-way analysis of variance
CS	: Cesarean section
DHEA	: Dehydroepiandrosterone
DSM	: Diagnostic and Statistical Manual
FDA	: Food and drug Administration
FGM	: Female genital mutilation
FSFI	: Female sexual function index
HIV	: Human immunodeficiency virus
HSDD	: Hypoactive sexual desire disorder
PVI	: Penile vaginal intercourse
SD	: Standard deviation
SPSS	: Statistical Program for Social Science
VD	: Vaginal delivery
VD/epi	: Vaginal delivery with episiotomy
WHO	: World Health Organization

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Abstract

Background: The definition of female sexual dysfunction has evolved over the past years. After giving birth, women often struggle with reduced sexual desire and arousal, but how they delivered – by CS or vaginally – is not to blame. **Aim of the Work:** Is to compare the female sexual function before pregnancy, first sexual activity after delivery and one year postpartum in relation to mode of delivery. **Patients and Methods:** The current study was carried out as a cross sectional observational study included women attending outpatient contraception clinic and pediatric outpatient clinic in El Demerdash hospital. **Results:** A total of 146 (45%) of these women had experienced vaginal delivery with episiotomy (VD/epi) and 178 (55%) individuals had a caesarean section (CS) delivery. Comparison between before pregnancy, first sexual activity after delivery and one year after delivery according to total FSFI score shows no statistically significant difference between before pregnancy, first sexual activity after delivery and one year after delivery according to FSFI score. **Conclusion:** Based on the current findings of this study, Postpartum sexual problems are common but delivery method has no long-term effect on female sexual Function where VD/epi has no impact on the sexual function of the women one year after delivery. Hence, undergoing CS in order to preserve sexual function is not a prophylactic measure. There was no statistically significant difference between VD/epi and cesarean section according to FSFI score in the three periods of participants' life; before pregnancy, first sexual activity after delivery, and one year after delivery. **Recommendations:** Health providers should educate women about the appropriate delivery type and the advantages and disadvantages of both procedures. Sexual problems are common in early months after delivery; which is not persistent, or related to mode of delivery. Health providers are suggested to develop a positive attitude towards VD, and change pregnant women misbelief of demanding CS to protect them against sexual dysfunction. Further study is required to evaluate the postpartum sexual dysfunction and its associated factors.

Key words: female sexual function, pregnancy, delivery, primiparae

Introduction

Female sexual dysfunction is known as being unable to reach or enjoy orgasm ***(Buhling et al., 2006)***. Sexual dysfunction can influence physical, social, and mental aspects of women's live; hence, nowadays more attention is given to the sexual health ***(Safarinejad, 2006)***.

Certain categories of female sexual function after child-birth have been studied by many investigators since 1960. Still, the major part of available studies is not sufficient to separate the data among the variant modes of deliveries ***(Serati et al., 2010)***. Over the first 3 months postpatum, many women experience some problems related to sexual function, such as dyspareunia, decrease libido, difficulty achieving orgasm, or vaginal dryness ***(Handa, 2006).*** Typically these problems sort out one year postpartum. There are three mechanisms which may subscribe to sexual dysfunction after delivery, dyspareunia, birth canal injury "pudendal neuropathy", and overall general health of the mother ***(Nama & Wilcok, 2011 and Handa, 2006).***

The pudendal nerve that innervate the clitoris, vulva, and perineum, may be damaged during VD by infants head pressure and/or forceps ***(Pollak et al., 2004).*** Furthermore, weak vaginal muscle due to vaginal prolapse can result in diminished ability to reach orgasm ***(Gungor et al., 2008).***

Undesired effect of VD on sexual function has been already recorded ***(Pollak et al., 2004*** *and* ***Gungor et al., 2008)***.

These studies have established that performing cesarean section (CS) keeps vaginal healthiness, maintains normal sexual function, and preserves anatomical and arrangement of the pelvic floor and intra pelvic organs ***(Wagner, 2000).*** Accordingly, CS has increased popularity and attitudes of women, midwives, and obstetricians have changed towards CS ***(Safarinejad et al., 2009).***

Aim of the Work

Is to compare the female sexual function before pregnancy, first sexual activity after delivery and one year postpartum in relation to mode of delivery.

Hypothesis

The mode of delivery may or may not influence women sexual function after childbirth.

Rational of the study

Proper decisions from obstetricians are of a great importance for Egyptian women's sexual health care (Eve's secrets).

Sexual Anatomy

The external genitalia, referred to collectively as the vulva, consist of the mons pubis, clitoris and bulbs, labia majora, and labia minora (Figure 1) ***(Levin et al., 2016).***

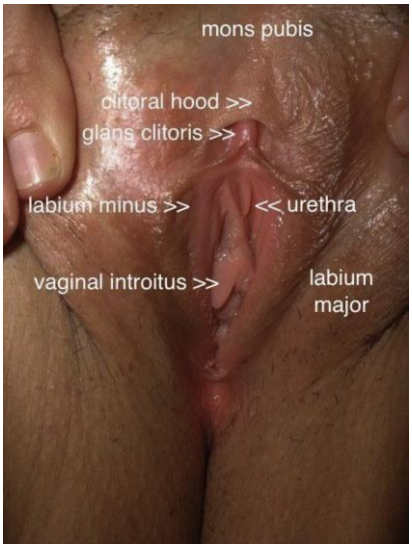

Figure (1): Female external genitalia (premenopausal woman). Image from: http://commons.wikimedia.org/wiki/File:Womans_vulva.jpg. Under GNU Free Documentation License.

The **mons pubis** is an area of fatty tissue overlying the pubic symphysis and covered by pubic hair. **Clitoral body** extends into the mons for several centimeters before bifurcating into the crura (singular ¼ crus), which run bilaterally under the inferior pubic rami. Between the crura lie the clitoral bulbs, draped over the urethra, with the bulk of the bulbar tissue lateral to the walls of vagina (Figure 2). Usually, only the glans clitoris is visible externally, approximately 1 cm anterior to the

urethral meatus, and the glans is often covered by the clitoral hood (or prepuce; Figure 1). **The labia majora** are fatty, elongated, hair-bearing folds of tissue forming the lateral boundaries of the vulva. The medial sides of the labia majora unite with the **labia minora**, which are thin crease of skin circumscribing the introitus, or inlet to the vagina. The anterior sides of the labia minora split and fuse with the frenulum of the glans clitoris on its ventral aspect and fuse over the glans as the hood. The posterior aspects of the labia minora connect in the midline at the lower aspect of the introitus ***(Levin et al., 2016).***

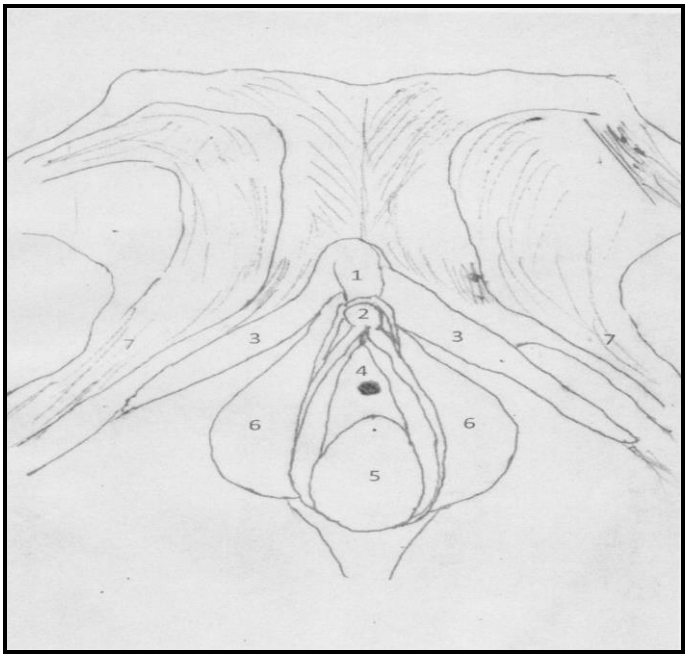

Figure (2): Female external genital structures. Clitoral complex ((1) body, (2) glans, (3) crura) in an inverted wishbone formation with the body in midline and crura extending posteriorly. Bulbar tissue (6) is draped over the urethra (4) and vaginal introitus (5). The bony pelvis (7) is shown.