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بسم الله الرحمن الرحيم

مركز الشبكات وتكنولوجيا المعلومات

قسم التوثيق الإلكتروني



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جامعة عين شمس

التوثيق الإلكتروني والميكروفيلم

قسم

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وبالرسالة صفحات لم ترد بالأصل



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**A Study on the Use of Postpartum Intrauterine
Contraceptive Device (PPIUD);**

Assiut Experience

Thesis

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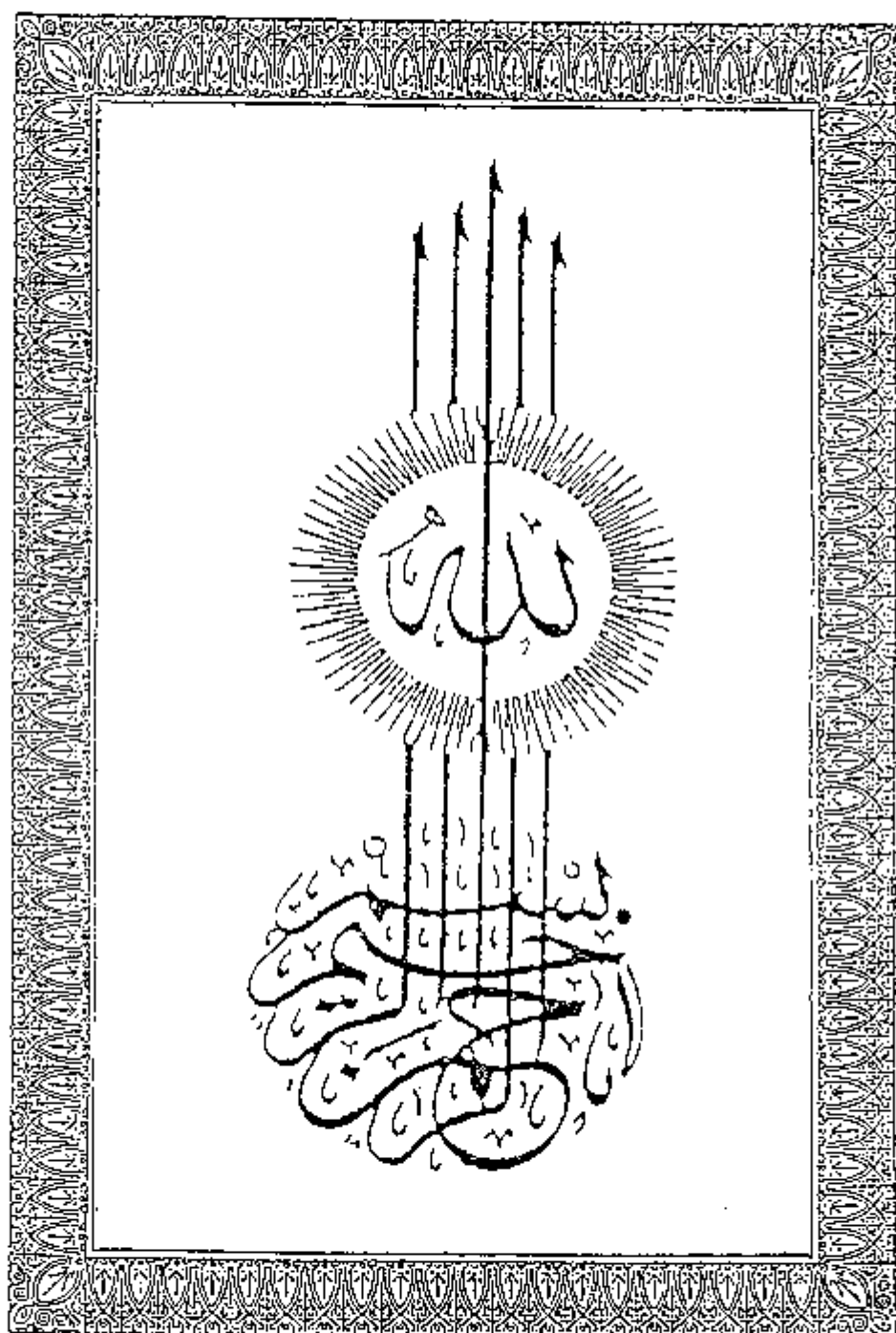
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Omar M. Shaaban

With all my love and appreciation

I dedicate this work to my

Father

Mother

Wife

And my little daughter Nour

Introduction

The care of pregnant women puts the obstetrician in an unique situation; at one moment he or she is concerned with ensuring the quality of reproduction, and shortly thereafter, is asked to help to limit its quantity. Family planning has become part of medical care expected by our patients.

The pregnant and postpartum women are generally highly motivated toward controlling their fertility either in spacing their children or in stopping their fertility altogether. The time during antenatal care and hospitalization of the women postpartum, may be the only time for the physician to get in contact with women who are poorly motivated to obtain routine health care. This group of clients are called "crisis oriented" toward medical care (Darnell, 1975).

The duration of the contraceptive effect of breast-feeding is variable. Accordingly, women who want an extended birth interval or no more children need to switch to another contraceptive method before ovulation resumes. The intrauterine contraceptive device (IUD) is a good contraceptive choice for the women, particularly those who are not yet ready for a permanent and generally irreversible sterilization.

Postpartum IUD insertion began in the 1960s with mixed success. Several studies were done and provided a basis for expanded use in 1990s. Different shapes of devices, different times for insertion along postpartum period and different insertion techniques were tried, and proved that these factors greatly affect the expulsion rate.

Aims of the work

This research aimed at detecting the factors influencing the acceptance of PPIUD. In addition it aimed at assessing the clinical performance of three groups of postpartum Tcu380A IUD insertions; the postplacental (within 10 minutes after delivery of the placenta); the predischARGE (within 48 hours after delivery and before discharge of the patient from the hospital); and the transcEsarean (during cesarean delivery and before the closer of the uterine incision). Moreover, the performance of these methods of insertion planned to be compared with the performance of interval insertion of the IUD.

The research also aimed to assess any increase in the side effects and complications with the use of PPIUD, specifically the problem of expulsion, missed threads, uterine infection, post-insertion pain, bleeding, and perforation in different types of PPIUD insertion, and to compare the rate of these side effects with that of interval IUD during the first 6-month after insertion.

The work also tried to determine of the percentage of clients who accept reinsertion of interval IUD after expulsion of PPIUD.

REVIEW

1. Evolution of the IUD and postpartum IUD:

The population explosion problem is a great challenge to the national and international progress and development. In Egypt, the birth rate is though declining but still high. The ideal contraceptive method has to be inexpensive, easily applicable, effective, needing minimal motivation, having minimal side effects, reversible and independent from sexual intercourse (Charles et al., 1984).

The intrauterine contraceptive device represents the modern application of ancient concept. Arabs and Turks discovered the idea that the presence of foreign body inside the uterine cavity prevents pregnancy. They found that if pebbles inserted in the uteri of their camels during long desert treks protects saddle animals from pregnancy (Finch et al., 1963).

Nowadays, the intrauterine contraceptive device (IUD) is established as an effective and low risk contraceptive method, which can be used, in a large scale. Over many years, many types of intrauterine devices have been tried. The first IUD to be widely used was a ring of silver inserted inside the uterine cavity. It has no tail and its use resulted in serious complication (Grafenberg, 1931).

Latter on with advance of the antibiotic therapy and decrease rate of uncontrollable infections, the idea of intrauterine devices was revived; and biologically inert materials like the plastic and polyethylene began to be used. Jack Lippes of USA added two important features, threads, were attached to the lower end of the IUD for detection and removal, and small amount of barium sulfate was added to the IUD to

render the device opaque in X-ray. Lippes loop was the first widely used plastic IUD with capability of retaining its shape after insertion. It was made from polyethylene, a biologically inert plastic (Lippes, 1962; Guttmacher et al., 1975).

In late 1960s, the copper medicated IUD was introduced and its use started in 1969, by Dr Jaime Zipper in rabbit and then tried in human. The first copper IUDs – the Cu-7 and TCu200 proved to cause lower side effects such as pain and bleeding than Lippes loop while retaining the efficacy (Tatum et al., 1968 and Zipper et al., 1969).

Later on the amount of copper bearing area was increased up to 380 mm² and these IUDs were called the second generation IUDs like TCu380A and S and multiload-375. The increase in the surface area covered by copper enhanced the efficacy and prolonged the duration of effective use for 10 years. The TCu380A IUD is made of polyethylene with barium sulfate added for visibility on X-ray. A copper wire is wound around an area of 314mm² on the vertical stem; and two 33mm² solid copper sleeves on each transverse arm. It has two types, the TCu380A with two copper sleeves on the vertical arms and TCu380S with copper sleeves at the end of the arms and recessed into the plastic. The TCu380A is now the most widely available IUD, distributed in more than 70 countries all over the world. (Schmidt et al., 1994)

Other types of medicated IUDs releasing hormones, like progestational compounds, which are delivered at a constant low rate directly to the uterus through a special limiting membrane. The levonorgestrel IUD (LNG 20) release about 20-ug levonorgestrel per 24 hours and this enhances the contraceptive efficacy of the IUD and decrease the amount of menstrual blood (Alza, 1976).