THE EFFECT OF ANTIPROSTAGLANDINS ON CIRCULATING PLATELET AGGREGATES IN IUCDs USERS WITH MENORRHAGIA

THESIS

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By

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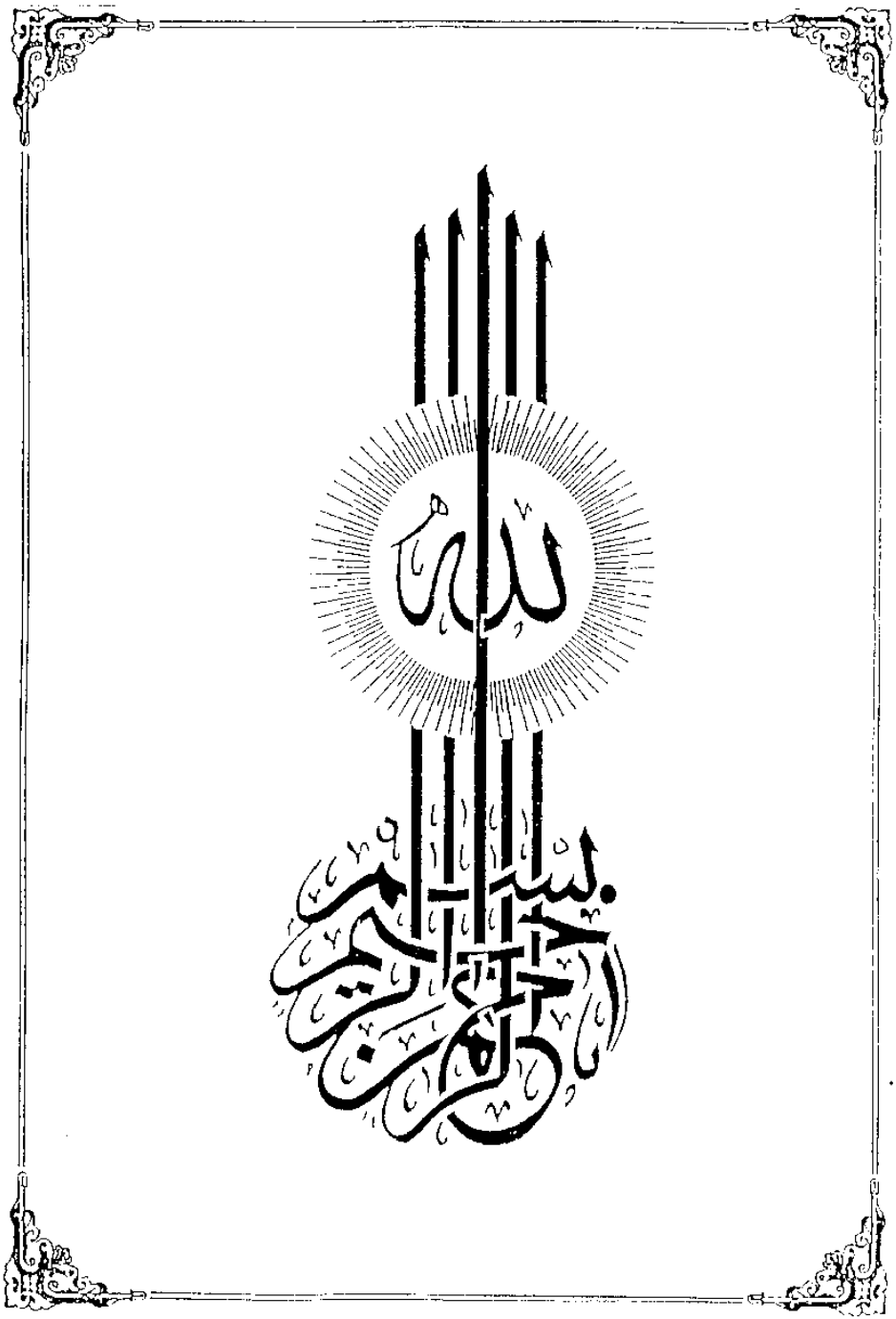

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INTRODUCTION

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For the last twenty years,intersuterine contraceptive devices have been used with varying success in clinical practic and in the family planning programs through out the world.

In theory the IUD is close to an ideal centraceptive method. Although it requires a clinical procedure,it is a physician dependant not related to coitus,usually requires a single insertion and rarelly causes systemic hazards.

It provides a long-term protection against pregnancy, easily reversed,and in the same time is relativly inexpensive.The ideal IUD would be placed into the uterus when a woman decides she no longer wants to conceive and it could remain there through out her life, or untill hystrectamy,or untill the woman disires renewed fertility (Tietz 1970).[223]

In practice,the first genration of IUDs gave problems of expulsion,accidental pregnancy,perforation, infection,pain and bleeding that made them less than ideal for many women.

Bleeding disturbances are the major drawbacks in using IUDs,and considered to be among the main reasons for discontinuing this method of centraception[68,164,199]

This bleeding which takes the form of intermenstrual spotting and /or menorrhagia is mostly seen during the first few days and month and tends to improve later.[169]

AIM OF THE WORK

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Intra-uterine devices are becoming increasingly used method of contraception throughout the world for the multiple advantages,rendering it preferable to other methods and sometimes,the method of choice for some women.

In spite of this, there are still some drawbacks rendering IUDs less than ideal.

Researches are going on to give the proper solution to these proplems.

One of the main drawbacks of IUDs is the bleeding disturbances in the form of menorrhagia and/or metrorrhagia.

Many trials with varying success have been done in this field.

The medicated IUDs,loaded with copper or progesterone have been developed.

Systemic treatment in the form of antiprostaglandins antifibrinolytics, hormonal and other drugs have been used with varying success.One of these drugs is mefenamic acid,which has been used with success in treatment of excessive bleeding with IUDs. The mechanism by which this antiprostaglandin,meferomic acid,redues excessive

uterine bleeding associating IUDs is not exactly well known.One of the postulated mechanisms is that it may increase platelet aggregation.

For this reason,in vivo circulating platelet aggregates were measured in an attempt to provide an accurate approximation of the behaviour of platelets in their natural situation in response to oral adminstration of antiprostaglandins.

REVIEW OF LITERATURE

UTERINE BLEEDING WITH IUDs

The term uterine bleeding is used to cover every deviation from the normal menstrual pattern.[198]

Normal menstrual blood loss ranges between 30-45 ml per menses.[72]

The menstrual period is considered to be complete when bleeding has ceased for at least two days.

TYPES OF BLEEDING WITH IUDs:

I . Increased menstrual blood loss at cyclical periods (MBL)

II . Increased duration of bleeding.

III. Intermenstrual bleeding and spotting(IMB).

The type of device used,duration of usage,varied individual response to the same type of IUDs,cultural and social background of the women,previous pattern of menstruation and the amount of blood normally lost before inserting the IUD,nutritional status,parity,may all play avariable role to influence the frequency of bleeding and IUD removeal[84]

I. Increased menstrual blood loss(MBL):

With the exception of progestational IUDs,all IUDs

lead to increase menstrual blood loos by about 50-I00 % over the usual preinsertion levels.[67,70,I04]

Larsson et al (1975)[119],have reported that 159 % increase of MBL. with Dalkon shield,compared to 146 % increase with lippes loop,while MBL with copper- 7was 57 % and with copper-T,it was 85 % .

Liedholm et al,[121] have reported that the larger non medicated IUDs are associated with a higher mean MBL than smaller copper-bearing IUDs. However,Hefnowi and co-workers (1977),[87] reported that the MBLs were not significantly different from women who used a lippes loop D with or without copper.

Malmquist, et al (1974),[133] reported that,women with documented preinsertion histories of menorrhagia have a proporitionally small increase in MBL than do women with normal preinsertion MBL.

Progestrone-releasing devices in contrast to other IUDs appear to reduce the MBL volume from the pre-insertion level[138].

Guillebaud et al(1976)[68],have studied the relation between parity and the increased MBL with IUDs. They