The Role of Prophylactic Use of Low Dose Aspirin And Calheparin In Patients With Unexplained Recurrent Abortion

Thesis

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CONTENTS

LIST OF FIGURES

LIST OF TABLES

ABSTRACT

In contrast to sporadic miscarriage, recurrent miscarriage is relatively uncommon, a history of three or more consecutive miscarriages occurs in 0.5-2 percent of women. Approximately 1 to 2 percent of women of reproductive age will experience three or more spontaneous consecutive miscarriages.

Recurrent miscarriage is a heterogeneous condition, the pathogenesis of which is multifactorial, complex and poorly understood. In order to provide successful treatment, a thorough understanding of possible reasons for miscarriage and an extensive diagnostic work-up to evaluate associated conditions is required.

Recently the use of thromboprophylaxis and aspocid is suggested to patients with recurrent unexplained abortion.

In our study 50 patients with recurrent abortion were classified into two groups one of them on calheparin and aspocid and the other on no treatment and data was collected according to fate of each group.

Keywords:

Miscarriage, recurrent miscarriage, recurrent unexplained abortion,

INTRODUCTION

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Recurrent miscarriages are the loss of three or more consecutive pregnancies before the 24th week of gestation. It is either primary (women without previous live born infant) or secondary (women with at least one prior live born infant) ***(Farquharson et al., 2002)***.

It affects about 0.5-1% of pregnant women. Allover for most women who experience miscarriage, the recurrence rate is below 30% and the chance of live birth after three consecutive losses is only 35%-45% ***(Diane 2002).***

The etiology of most recurrent miscarriage remains unclear. The majority of cases, after excluding anatomic, genetic, microbiologic, and hormonal causes of abortions and complete medical, surgical, and social history, remain idiopathic ***(El-Far et al., 2007).***

Although controversial, various reports have claimed that hereditary thrombophilias may predispose to thrombosis in decidual vessels, and subsequent fetal hypoxia and pregnancy loss ***(Martinelli et al., 2000)***

According to the literature, after three or more pregnancy losses, the live birth rate is expected to be 60%, and after four losses, the live birth rate is only expected to be 40%, if blighted ova are not excluded ***(Carp, 1997)***

Patients with recurrent miscarriages have been successfully treated with aspirin and low dose heparin with average to very high success rates, a treatment though confined only to those associated with antiphospholipid syndrome which does not represent more than 15% of all cases ***(Rai** et al., **2001)***

Pregnancy itself is a hypercoaguable state associated with increased levels of procoagulant factors and decreased levels of naturally occurring anticoagulants such as protein S. The overall fibrinolytic activity is impaired due to increase of plasminogen activator inhibitor-2 ***(Kruithof et al., 1987).***

Dolitzky and co-workers (2006) held study in the randomized use of low dose aspirin and enoxaparin on women with unexplained recurrent pregnancy loss and found that the regimens was associated with a high live birth rate and few late pregnancy complication.

Aim of the Work

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Aim of the work is to study the effect of prophylactic use of low dose aspirin and heparin on patients with recurrent unexplained pregnancy loss.

REVIEW OF LITERATURE

CHAPTER (1)
MISCARRIAGE

Miscarriage may be defined as the loss of a pregnancy before 24 completed weeks of gestation ***(Royal College of Obstetricians and Gynaecologists, 2006).*** An alternative definition is a pregnancy that fails to progress, resulting in the death and expulsion of the embryo or foetus weighing 500 g or less, corresponding to a gestational age of up to 20 week ***(WHO, 1977).***

Miscarriages are generally classified as first trimester (up to 12 weeks' gestation) or late (from 12–24 weeks' gestation) ***(Bottomley and Bourne, 2009).***

TERMINOLOGY

A very wide range of terms is used in the diagnosis of miscarriage. The term 'abortion' or 'spontaneous abortion' is always avoided due to the possible confusion with therapeutic TOP (which may also be referred to as 'abortion') and the social stigma that has developed around this term. However, 'early pregnancy loss', 'early foetal demise' and 'miscarriage' are all possible terms ***(Farquharson*** *et al.,* ***2005).***

Abortion is one of the most common complications of pregnancy, occurring in 10–15% of pregnant women. It is defined as pregnancy that fails to progress resulting in death of the fetus before age of fetal viability 20th week (weight of fetus ≤ 500 g) in developed countries and 28th week (weight of fetus ≤ 1 kg) in developing countries). Recurrent spontaneous abortion, rate of 2–5%, is defined as ≥ 3 spontaneous abortions (consecutive or not). In these women, it is necessary to conduct a comprehensive evaluation so that a plan of care can be outlined ***(Daya, 2004)***.

Table (1): Terms and definitions used in the diagnosis of miscarriage ***(Royal College of Obstetricians and Gynaecologists, 2006, Farquharson*** *et al.*, ***2005)***

Term	Definition	Fetal heart activity
Biochemical pregnancy loss	History of a positive pregnancy test followed by negative test, without an ultrasound assessment having been performed.	Never
Empty sac	Gestation sac with absent embryonic structures or gestation sac with embryonic structures and no heart activity.	Never
Fetal loss	Previous identification of embryo or fetus and fetal heart activity followed by loss of heart activity	Lost
Early pregnancy loss or Delayed miscarriage	Intrauterine pregnancy with evidence of lost fetal heart activity and/or failure of crown rump length to increase over one week or persisting presence of an empty sac, at less than 12 weeks gestation	Lost/never
Late pregnancy loss	After 12 weeks gestational age where fetal measurement and heart activity is followed by loss of fetal heart activity	Lost