Substance P Level in Peritoneal Fluid in Patients With Infertility

Thesis

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Of Master Degree of Obstetrics/Gynaecology

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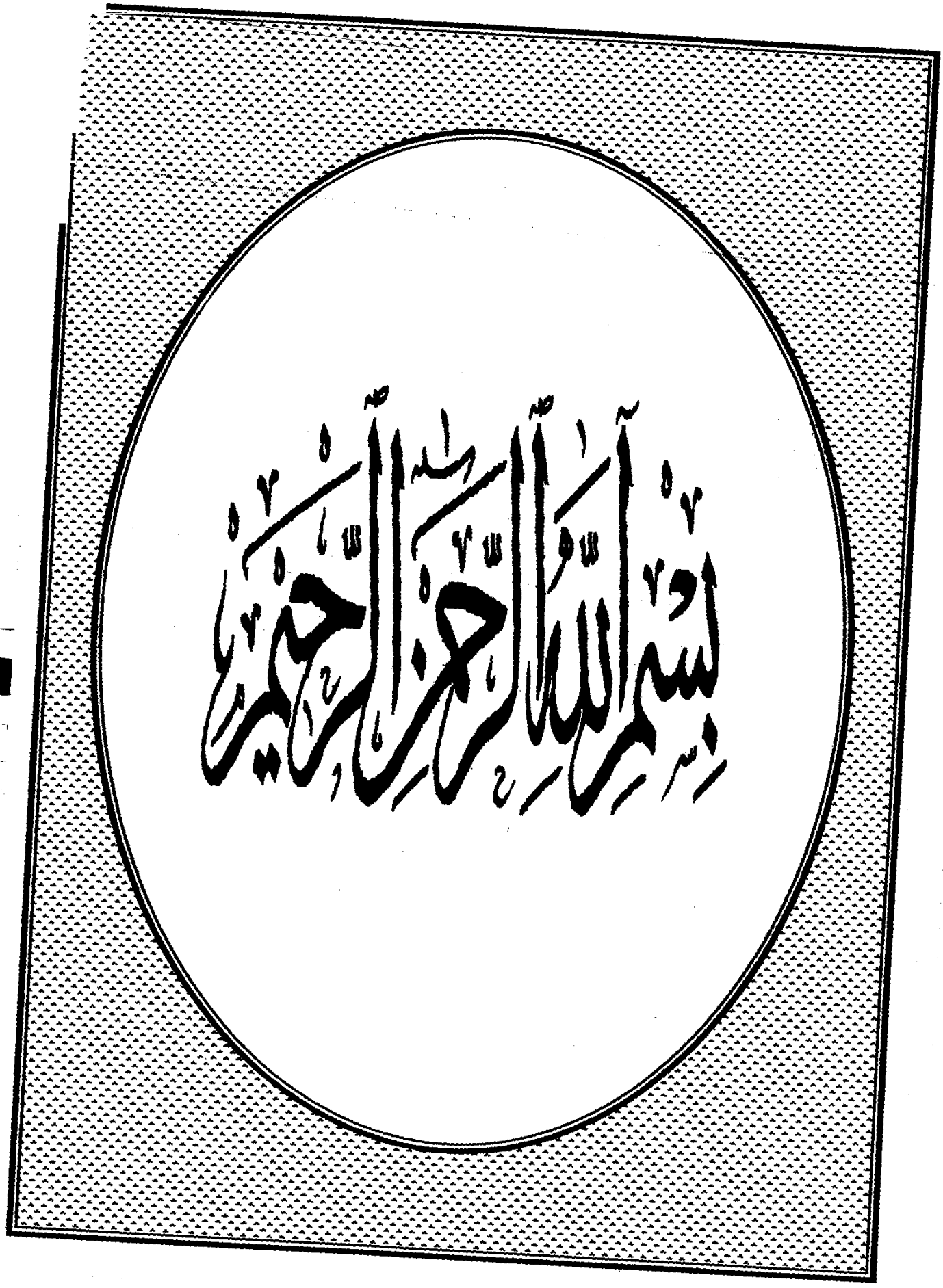

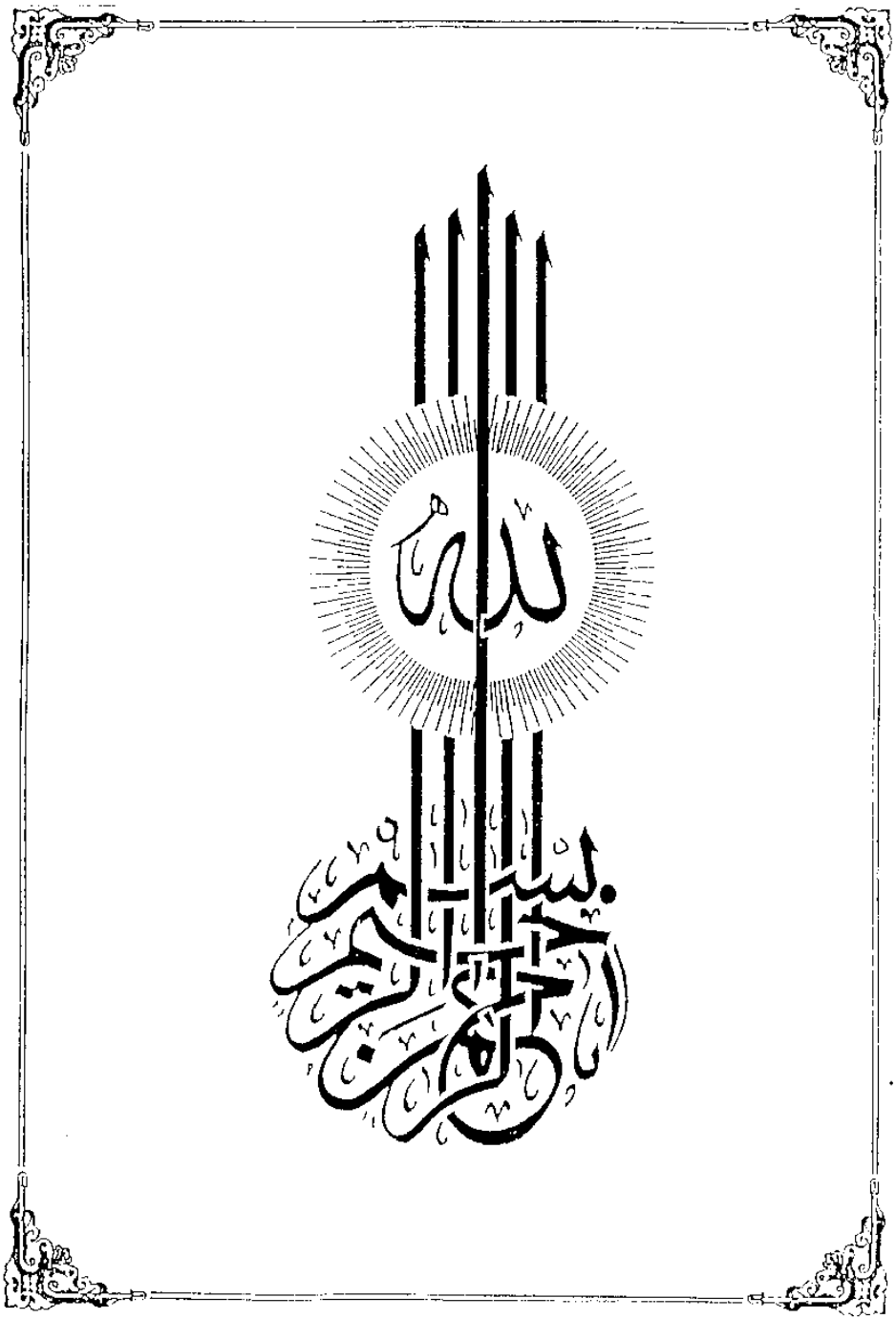

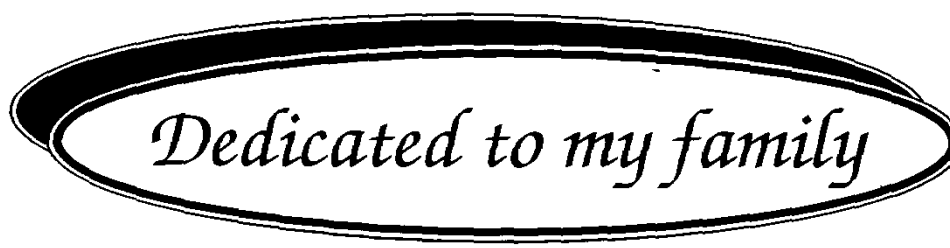

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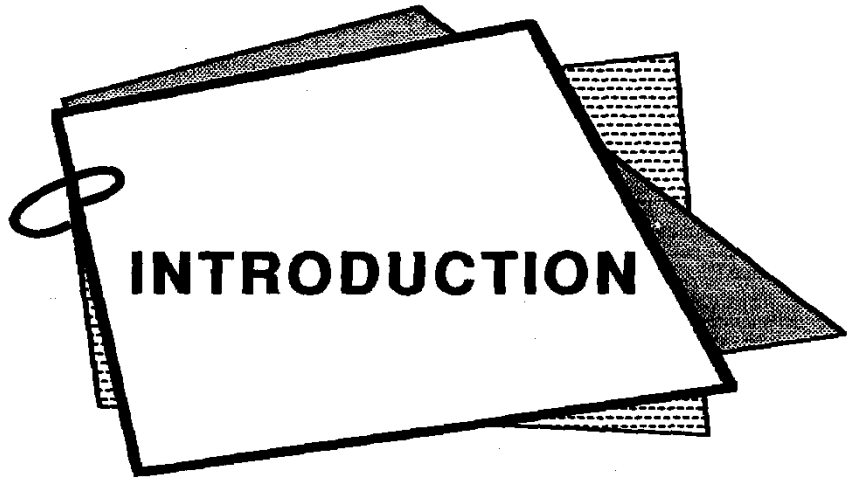
Ashraf Abdel Hakim

CONTENTS

LIST OF TABLES

LIST OF FIGURES



INTRODUCTION

Infertility is seldom, if ever, a physically debilitating disease . It may , however, severely affect the couple's psychological harmony, sexual life and social function ***(Insler and Lnenfeld, 1993).***

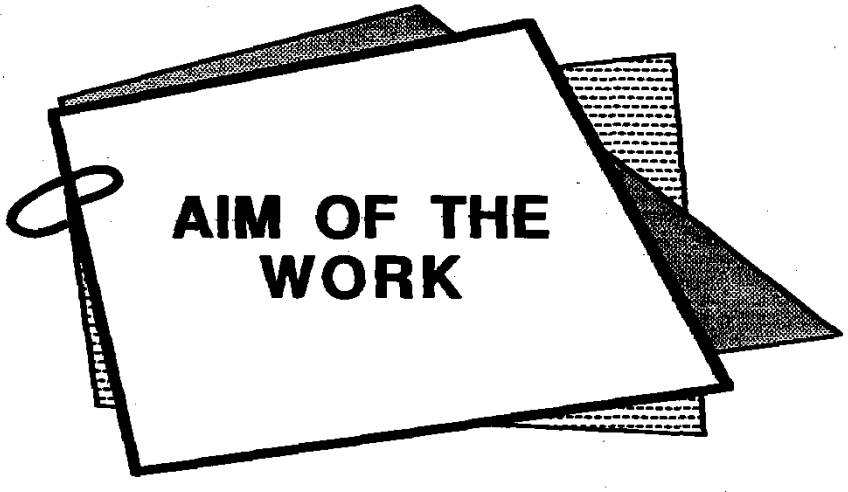
The interest in the components of pelvic peritoneal fluid was initiated when ***Sampson, 1927*** suggested that endometriosis tissue could be transported from the uterus to peritoneal cavity by retrograde menstruation.

Recent interest has centered around an adverse effect of peritoneal fluid environment on early reproductive events ***(Alex et al., 1990).***

Many studies have been performed to evaluate the pelvic cavity environment, but there were no clear marker related to infertility ***(Morcos et al., 1985).*** It has been reported that peritoneal fluid from patients with endometriosis caused decreased fertility in the mouse model and toxic effects on mouse embryo cleavage. ***(Sueldo et al., 1990).*** Substance P is brain - gut peptide consisting of eleven amino acids and belonging to family of tachykinins. In brain it behave as neuropeptide and may have a physiological role as an inhibitor of gonadotropin-releasing hormone

(Vijayan and Mccan, 1979). Joseph et al., 1992 postulated that substance P is present normally in peritoneal fluid and that its levels are not affected by pelvic adhesions or endometriosis.

It has been theorized that the presence of substance P in the peritoneal fluid may play a role in regulating tubal motility during ovulation and alteration in levels of substance P may alter tubal motility in pathologic condition *(Zetler et al., 1969).*



AIM OF THE WORK

To determine the following:-

1. If substance P is present in peritoneal fluid or not
2. Whether substance P level in peritoneal fluid correlate with the cause of primary and secondary infertility "Endometriosis, pelvic Adhesions" or not.