شبكة المعلومات الجامعية

بسم الله الرحمن الرحيم

شبكة المعلومات الجامعية

التوثيق الالكتروني والميكروفيلم

شبكة المعلومات الجامعية

جامعة عين شمس

التوثيق الالكتروني والميكروفيلم

قسم

نقسم بالله العظيم أن المادة التي تم توثيقها وتسجيلها

علي هذه الأفلام قد أعدت دون أية تغيرات

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بعض الوثائق الاصلية تالفة

بالرسالة صفحات لم ترد بالاصل

"Evaluation of blood level of antioxidants in cases of recurrent spontaneous abortion"

THESIS

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TO

MY PARENTS

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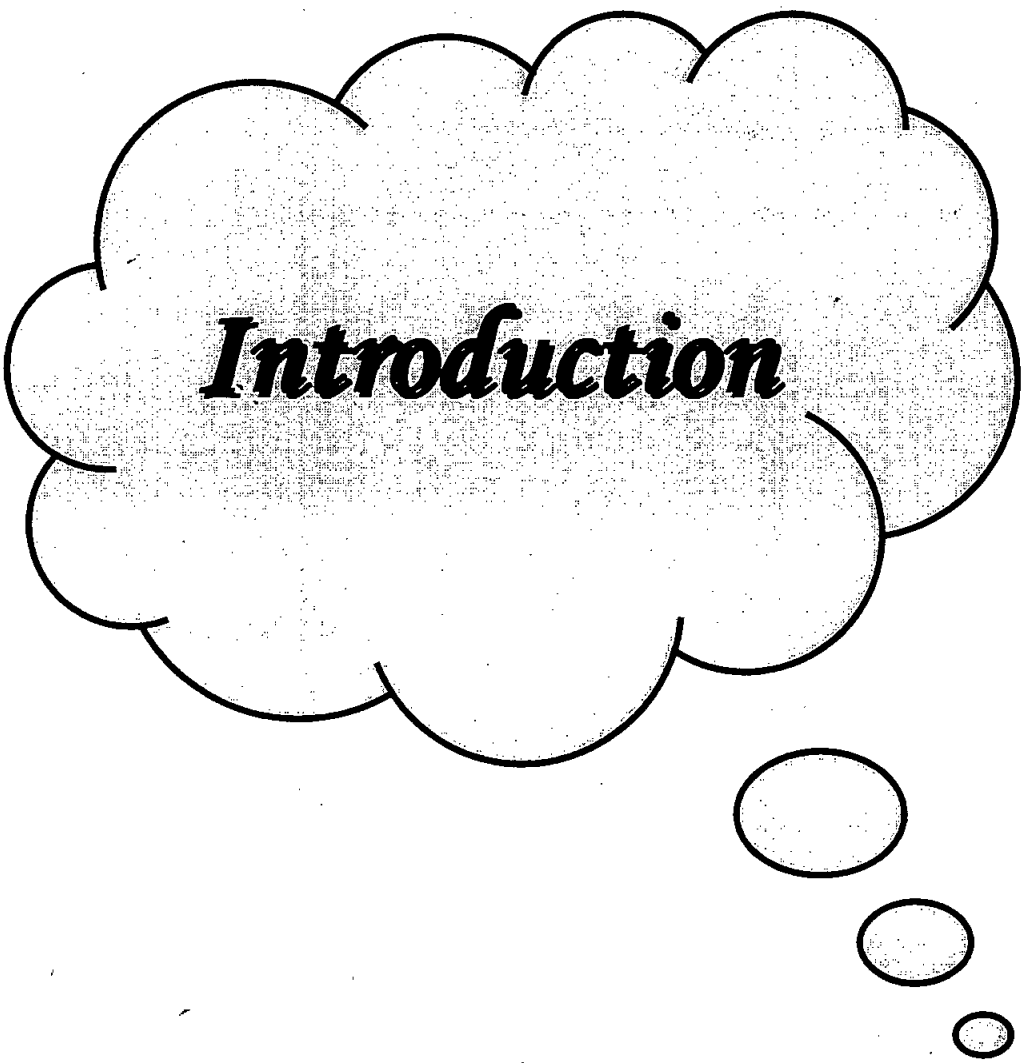
Introduction

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Definition of Abortion:

Spontaneous abortion is defined as any recognized involuntary pregnancy loss occurring before foetal viability (24weeks), approximately 80% of all spontaneous abortions occur before 12 weeks and are called early abortions, the rest occur between the thirteenth and the twenty fourth week and are called late abortions . [(1)]

Incidence:

Spontaneous abortion is the most common complication of pregnancy. Approximately 70% of human conceptions fail to achieve viability, and an estimated 50% are lost before the first missed menstrual period. [(2)] Most of these pregnancy losses are unrecognized. Recent studies using sensitive assays for human chorionic gonadotropin (hCG) have indicated that the actual rate of pregnancy loss after implantation is 31%. [(3)]

The risk of spontaneous abortion for a woman with no history of reproductive wastage is about 15%. [(1)] The study of Poland et al indicated that the likelihood of a repeated abortion after a first spontaneous

abortion for a woman with no living children is 19%. If there is a history of two consecutive spontaneous abortions, the risk increase to 35% and if the history is of three consecutive abortions, the likelihood of a repeated abortion is 47%. [4]

In a study of women doctors, the occurrences of one, two and three miscarriages were reported to be 10.4, 23 and 34 percent, respectively (Alberman, 1988). [28]

Mechanism of abortion

The cause of abortion is the separation of the ovum by minute haemorrhage in the decidua. The altered uterine environment stimulates the onset of uterine contractions, and the process of abortion begins. Bleeding starts in the choriodecidual space, separating the anchoring chorionic villi from their attachment to the deciduas. When the bleeding is not excessive and the pains are minimal, the condition may be reversible and the pregnancy may continue with proper treatment (*Threatened Abortion)*. If the process of abortion continues, the cervix dilates and the ovum or fetus passes out through it and then passes down the vagina and vulva *(Inevitable Abortion)*. [5] Between the 8^{th} and 14^{th} week, the mechanism may be as described or, more commonly, the membranes rupture expelling the defective fetus, but the placenta is only partially separated and protrudes through the cervix into the vagina, or remains attached to the uterine wall *(incomplete abortion*). After the 14^{th}

week, the fetus is usually expelled, followed by the placenta. *(complete Abortion).* [5]

Pathology:

Haemorrhage into decidua basalis and necrotic changes in the tissues adjacent to the bleeding sites usually accompany abortion. When the sac is opened fluid is commonly found surrounding a small macerated fetus, or, there may be no visible fetus in the sac, the so called blighted ovum.

Microscopically, the placental villi often appear thick and distended with fluid, the ends of the villous branches resembling little sausage shaped sacs which undergo molar degeneration. Blood or carneous mole is an ovum that is surrounded by a capsule of clotted blood with degenerated chorionic villi scattered through it. The small fluid-containing cavity within appears compressed and distorted by the thick walls of old blood clot. [6]

Usually, an explanation can be found for the large majority of spontaneous abortions. The most frequent causes are: [1]

I. Genetic abnormalities, 50% to 60% of cases.

II. Endocrine abnormalities, 10% to 15%.

III. Chorioamniotic Separations 5% to 10%.

IV. Incompetent cervix 8% to 15%.

V. Infections, 3% to 5%.

VI. Abnormal placentation, 5% to15%.

VII. Immunologic abnormalities 3% to 5%.

VIII. Uterine anatomic abnormalities 1% to 3%.

IX. Unknown reasons, less than 5%.

Recurrent Spontaneous Early Pregnancy Loss:

Spontaneous abortion is the most common complication of pregnancy and is responsible for significant emotional distress to couples desiring children. Approximately 70% of human conceptions fail to achieve viability, and an estimated 50% are lost before the first missed menstrual Period. (24)

Most of these pregnancy losses are unrecognized. Recent studies using sensitive assays for human chorionic gonadotropin (hCG) have indicated that the actual rate of pregnancy loss after implantation is 31%. (25)

Traditionally, recurrent abortion has been defined as the occurrence of three or more clinically recognized pregnancy losses before 20 weeks from the last menstrual period. It occurs in approximately one in 300 pregnancies. (25)

Clinical investigation of pregnancy loss, however, should be initiated after two consecutive spontaneous abortions, especially when fetal heart activity has been identified prior to the pregnancy loss, when