LEADING ARTICLE

Bad Obstetric History: Etiology and Risk Factors

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As the Iraqi health care system has evolved, people have had to take a more effective role in the care they receive. [1]. Fortunately, taking more responsibility for understanding community health care and individuals communicating with their doctor can help extend society healthy years. Preventive medicine is one area of health care in which all consumers can exercise more dependability and control. Getting regular screening tests for common health problems is a simple and effective first stage. Screening tests can give the community and health care providers the information needed to recognize health risks and take preventive measures before they become more severe problems [2].

Screening tests include self-checks, clinical exams, non-laboratory tests (such as imaging tests), and laboratory tests. The focus here is on laboratory screening tests. Getting routine tests performed even though you have no signs can help discover problems early and help you profit from easier and more active treatment. It can sometimes even prevent disease.

During the past decade, tremendous research works have been made in determining fetuses at danger of an adverse obstetric outcome. The term 'bad obstetric history (BOH) or bad obstetric outcomes (BOO), is applied to mothers in whom a previous poor obstetric outcome is likely to have a bearing on the prognosis of her present pregnancy. The responsible factors may be demographic, social, medical, psychological, behavioral, obstetric or environmenta1 [3,4]

Prenatal care may be better organized if risk assessment could be instituted for all pregnant women. The risk assessment should be formal using regular data sheets and investigative tests, and dynamic to permit the recognition of emergent problems during the course of pregnancy and enable individualization of treatment to meet the patient's individual needs. Special attention should be given to these problems and attempts made to correct medical abnormality [5].

· The first trimester of pregnancy is an important stage often associated with complication like bleeding and pain, leading to severe apprehension in the mother. Pregnancy loss has been attributed to numerous factors involved in human reproduction, recurrent pregnancy wastage due to maternal infections transmissible in utero at various stages of gestation can be caused by a wide range of organism which include the TORCH complex (Toxoplasmosis gondii, rubella virus, cytomegalovirus, herpes simplex virus) and other agents like Chlamydia trachomatis, Treponema pallidum, Niesseria gonorrhoeae, HIV etc. Toxoplasmosis obtained during pregnancy may cause damage to the fetus [3].

The goal in evaluation of a pregnancy loss is to provide families with accurate diagnosis and information on which to base the future pregnancy organization and management [6]· Bad obstetric history is an occasional cause of sporadic spontaneous abortion and consistent with statistical probability. In more countries pregnancy is not properly planned, complications are more which unfavour

mothers and infants health disorder [7]. Overall incidence of bad obstetric history in literature is variable with large etiological heterogeneity [3,4].

Statement of the Problem:-

Bad obstetric history (BOH) is previous unfavorable fetal outcome in terms of two or more serial spontaneous abortion, history of intrauterine fetal death, intrauterine growth retardation, still births, early neonatal death and/or congenital anomalies. Cause of BOH may be genet [3,4]. Primary infections caused by TORCH—*Toxoplasma gondii*, rubella virus, cytomegalovirus (CMV), and Herpes simplex virus (HSV)—is the major cause of BOH [8-17]. Additionally, immunological factors may play a role as cause of bad obstetric history [18,19].

The prevalence of these infections varies from one geographical area to another [3,4]. These maternal infections are initially unapparent or asymptomatic and are, thus, difficult to diagnose on clinical grounds, recurrent pregnancy wastage due to maternal infections transmissible *in utero* at various stage of gestation can be caused by a wide array of organisms which include the TORCH complex [20].

Therefore, the diagnosis of acute TORCH infection in pregnant women is usually established by seroconversion in paired sera or by demonstration of specific IgM antibodies. Enzyme-linked immunosorbent assay (ELISA) for IgM antibodies against these infections is highly sensitive and specific [21]. The conventional single serum assays do not make a clear distinction between a recent primary and chronic infection. The tendency of specific IgM to persist for a long time even at high levels has been confirmed in several studies [22]. After its introduction in sero-diagnosis of *Toxoplasma*-associated infections, the measurement of IgG avidity has demonstrated to be a highly-useful procedure, especially in combination with conventional serological assays [23].

Human parvovirus B19 infection has been detected in a numeral of developed countries throughout the world with adult seroprevalence rates varying from 30% to 60% in the adult population. Fetal effects of B19 infection during pregnancy can result in fetal anaemia, spontaneous abortion, congenital anomalies, and NIHF. The break between maternal infection and the occurrence of hydrop's fetalis is often four to five weeks but may be as long as 11 weeks. NIHF due to B19 virus has been reported only occasionally and reports of congenital malformation due to B19 infection are rare. However, B19 DNA was not detected in placental tissues, which could be due to PCR inhibitors such as hemoglobin; furthermore, tissue distribution of B19 in infected tissues is not known. Direct detection of viral particles or genomes in maternal blood is of little help since viraemia seldom persists for more than two weeks in an immune competent individual, although detection of B19 DNA in maternal blood has the best diagnostic sensitivity for recognizing maternal infection [24,25].

Human papilloma virus is another viral infection that may affect the pregnancy outcome [17, 26]. Forty-eight studies provided HPV-type specific prevalence data in women with normal cytology . The five most common types of HPV were HPV 16 (2.5%), HPV 18 (0.9%), HPV 31 (0.7%), HPV 58 (0.6%) and HPV 52 (0.6%). The authors estimated that the overall burden of HPV infection from the age-specific adjusted prevalence in cytologically normal women to be 291 million women infected with HPV of whom 23.3% were estimated to be infected

with HPV 16 and 8.5% with HPV 18 [27]. In a recent study in Kirkuk, Iraq, [17], although, HPV-16 and HPV-18 infections were detected in low rate in women with BOH and not in women with normal pregnancy, however, a large scale study warranted. In conclusion, taking the data of the above studies collectively, it suggest that BOH is still represent a medical and social problem in Iraqi community and may microbiological infections reported to be associated with pregnancy loss.

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