Original Paper

Risk factors in ectopic pregnancy: a case - control study

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Abstract

Background and Objective: The incidence of ectopic pregnancy is increasing due to artificial reproductive technology and increasing rate of sexual transmitted diseases. Ectopic pregnancy is the most common cause of maternal mortality in the first trimester and it reduces the chance of future successful pregnancy. Identifying the risk factors can help to reduce the maternal mortality and morbidity due to early diagnosis and on time treatment. This study was carried out to assess the risk factors in ectopic pregnancy in northern, Iran.

Materials and Methods: This case control study was carried out on 150 patients with ectopic pregnancy as cases and 300 women with normal pregnancy as controls. The subjects were selected from teaching hospital in Babol in northern Iran, during 2005-09. The risk factors include history of tubal surgery, ectopic pregnancy, cesarean section, pregnancy with IUD, infertility, assisted fertility with IUI, multiple partner, pre-eighteen years marriages were recorded for each subject by direct interview and file. Data were analyzed using SPSS-16 and Chi-Square and exact Fisher tests.

Results: Therapeutic assisted fertility with IUI (95% CI: 3.02-185.09, OR: 23.6, P<0.05), previous ectopic pregnancy (95% CI: 1.90-73.94, OR: 8.19, P<0.05) and cesarean section history (95% CI: 1.1-2.6, OR: 1.7, P<0.05) increased the possibility of ectopic pregnancy. There was not significant differences between pre-eighteen years marriages, infertility history and multiple partner in cases compared to controls.

Conclusion: This study showed that assisted fertility with IUI, previous tubal surgery, pregnancy with IUD, previous ectopic pregnancy and cesarean section are the main risk factors of ectopic pregnancy in northern, Iran.

Keywords: Ectopic pregnancy, Assisted fertility with IUI, Cesarean section history, Uterian tubule surgery, Pregnancy with IUD

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