Evaluation of diagnostic ability of shock index in comparison to vital sign in ruptured ectopic pregnancy

Abstract

**Background & Objective:** Ectopic pregnancy is a main cause of maternal death and is 10-15% of referred patient to first trimester emergency ward. Due to importance of early detection and prevention of excessive blood loss in Ectopic pregnancy this study designed that evaluated the correlation between vital signs and quantity of hemo-peritoneum and except of traditional vital sign another method with more sensitivity can be used in detection of tubal rupture and necessity of Emergency surgery.

**Materials & Methods:** This study is a analytic cross sectional design in 105 patients had diagnosis of ruptured ectopic pregnancy in fatemieh hospital. positive predictive value and sensitivity and specificity of pulse rate, BP and shock Index (SI) in correlation to ruptured Ectopic pregnancy and hemoperitoneum evaluated.

**Results:** Hundred five patients were studied (70 ruptured EP and 35 unruptured EP). Mean of shock index in unruptured and ruptured EP was 0.6±0.29 and 0.94±0.22 respectively that was nonsignificant (p<0.05) Sensitivity of pulse rate, systolic pressure and shock Index (Pulse/SBP) was 17.6%±9%, 32.4 %±10% and 91.4%±6% respectively. negative predictive value was 34.1%, 38.7 % and 50% respectively.mean primary Hb had no difference in two group.

**Conclusion:** Normal vital sign alone are poor predictors of ruptured ectopic pregnancy and shock Index (Pulse/SBP) Correlate best with the quantity of intaperitoneal hemorrhage.

**Key Words:** Ectopic pregnancy, Vital sign, Shock Index