Correlation between sonohystrography and hystrosalpingography in the diagnosis of uterus and tubal abnormalities in infertile women

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Introduction: Due to high prevalence of uterus abnormalities, assessment of uterine and ovarian tubes is important for preliminary management of infertility. Sonohystrography and hystrosalpingography are two diagnostic techniques which are widely used for diagnosis of uterus abnormalities and tubal pathologies. Since sonohystrography is more convenient (for both patient and radiologist) than hystrosalpingography we decided to study the reliability of the two techniques in accordance to each other, in patients who refer to Rooyan Institute. The main aim of this study was to define the correlation between sonohystrography and hystrosalpingography in the diagnosis of tubal and uterus abnormalities.

Materials and Methods: In a cross-sectional study on 72 infertile females who met the inclusion criteria (2001-2003) both hystrosonography and hystrosalpingography were performed and according to the results, the percentage of correlation and Kappa index were calculated. P<0.05 was considered significant.

Results: Of the 72 studied patients, 57 had primary infertility. Considering patency of ovarian tubes, the percentage of agreement between the 2 techniques was 92.9% and for uterine cavity this index was 66.67%. The corresponding Kappa indices were 51% and 22%, respectively.

Conclusion: The calculated correlations in this study were similar to those found by other researches. However, cost-effectiveness and efficacy of each procedure (Performed separately or combined with each other) remain to be studied.

Key Words: Infertility, Sonohystrography, Hystrosalpingography, Degree of agreement, Kappa, and Reliability.

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