Comparison of hysterosonography and hysterosalpangiography in the diagnosis of intrauterine abnormalities in infertile women

Zeinalzadeh M. (M.D.)¹, Nazari T. (M.D.)¹, Baleggi M. (B.Sc.)².
1-Assistant Professor, Obs & Gyn Department, Fateme Zahra Infertility Center, Shahid Yahyanejad Hospital, Babol University of Medical Science, Babol, Iran.
2-Midwife, Babol University of Medical Sciences, Babol, Iran.

Abstract

Uterine abnormalities are found in approximately 34-62% of infertile women. Because of this relatively high prevalence of uterine abnormalities, evaluation of uterine cavity is performed in the primary evaluation of infertility. The purpose of this study was to compare the diagnostic accuracy of hysterosonography with that of hysterosalpangiography for the evaluation of abnormalities of uterine cavity of infertile women. Sixty six infertile women were prospectively evaluated with hysterosalpangiogram (HSG) and hysterosonogram (H/S) as a part of their infertility workup. The result of each examination was compared with what was obtained by hysteroscopy as a golden standard. The results of H/S agreed with hysteroscopy in 95.5% (K=0.86) while HSG agreed with hysteroscopy in 87.9% (K=0.64) of cases. Sensitivity of H/S was 85.7% and its specificity 98.1%, while sensitivity of HSG was 71.4% and its specificity 92.3%. Hysterosonography was in general more accurate test and appeared to be an acceptable first-line evaluation for intrauterine structure. We recommend use of hysterosonography as a noninvasive, easy, inexpensive, effective and well-tolerated method of investigating the intrauterine cavity in infertile women instead of hysterosalpangiography.

Keywords: Infertility, Hysterosalpangiography, Hysterosonography, Hysteroscopy and Intrauterine abnormality.

Corresponding address: Dr. Zeinalzadeh M., Obs & Gyn Dep, Shahid Yahyanejad Hospital, Mostafa Khomeini Ave., Babol, Iran.
Email: zeinalmahtab@yahoo.com