

Uterine Niche and Secondary Infertility: Agreement in Diagnosis Using Hysterosalpingography vs. Hydrosonography

ABSTRACT

Objectives:

To compare the accuracy of hydrosonography and hysterosalpingography in diagnosis of niche and to evaluate the correlation between niche and sub-infertility.

Study Design:

A prospective observational cross-sectional comparative study

Patients and Methods:

The study was carried out on 50 women underwent at least one caesarean section with unexplained secondary infertility presented at the outpatient obstetric clinic at Fayoum university hospital. Assessment of uterine scar in each woman was performed using 2D transvaginal with Saline Infusion hydrosonography (SHG) followed by hysterosalpingography.

Results:

The prevalence of niche among our studied women was (62%, 31 cases) as diagnosed by Hydrosonography, while by Hysterosalpingography, the prevalence was (56%, 28 cases). Hydrosonography and hysterosalpingography showed strong substantial agreement regarding niche with kappa (κ) 0.712. Using hysterosalpingography can diagnose post-CS niche as compared with hydrosonography with 83.9% sensitivity 89.5% specificity, 92.9% PPV, 77.3% NPP and 86% accuracy.

Conclusions:

We detected a strong substantial agreement between hydrosonography and hysterosalpingography in diagnosis of niche.