Introduction

Hysterosalpingography is a valuable technique in evaluation of the patient that has undergone hysteroscopic transcervical sterilization by placement of Essure microinserts or Adiana. In the Essure procedure, a microinsert is placed into the interstitial portion of each fallopian tube under hysteroscopic guidance (1). The Adiana sterilization method is a combination of controlled thermal damage to the lining of the fallopian tube followed by insertion of a non-absorbable biocompatible silicone elastomer matrix within the tubal lumen (1). Without the completion of a hysterosalpingogram indicating bilateral tubal occlusion, both the Essure and Adiana procedures are deemed unsuccessful and not reliable for the prevention of pregnancy (2).

Objective

The goal of this study was to evaluate efficiency of Adiana and Essure tubal occlusive devices three months post placement through hysterosalpingogram. Success and failure rates of the devices resulting in either tubal occlusion or tubal patency as well as associated possible reasons for failure were recorded on review of the examinations.

Methods

Retrospective random analysis of 78 patients 26 years of age and older, who underwent hysterosalpingogram exams three months post placement of Adiana and Essure tubal occlusive device were entered into the study. The exams were reviewed and the results were categorized into success or failure of the device based on occlusion or patency of the tubes. These results were recorded and compared to the results listed in literature. Further review of the examinations with result of tubal patency and failure of device were evaluated for possible reasons of failure.

Hysterosalpingogram Evaluation of Transcervical Sterilization Devices Including Adiana and Essure Tubal Occlusive Devices For Permanent Birth Control Method.

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References


Results

Of the 78 patients data that were reviewed for this analysis, 48 of the patients had Essure microinserts placed and 30 of the patients had Adiana sterilization procedure performed. Of the Essure patients, 44 patients had success with bilateral tubal occlusion, while 4 patients had failure of the device due to either unilateral or bilateral tubal patency (Figures 1 and 2). Of the 30 Adiana patients, 24 had success of the device, while 6 had failed devices due to either unilateral (Figures 3 and 4) or bilateral tubal patency.

Conclusion

In the current package labeling, Essure’s successful bilateral placement rate is 94.6%, while Adiana’s is 94% (1). Data collected in current study demonstrates only 92% success rate for Essure and only 80% success rate for Adiana. Failure rate in Adiana patients is 12 % higher than in Essure patients in current study. Reasons for failure diagnosed through hysterosalpingograms performed in this study include: 1) Improper placement of Essure device, 2) Expulsion of Essure microinserts into peritoneal cavity, 3) Fallopian tube ectasia, 4) Exceeding Adiana intrauterine pressure limit through contrast placed by radiologist and 5) Tubal Adhesions.