Hydrosonography versus hysterosalpingography or laparoscopy in female infertility

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Introduction:
Tubal pathology:
- One of the most common causes of female infertility
- A frequency of 20 to 30%
- Frequency underestimated
- The transvaginal ultrasound with contrast enhancement (TUCE) is an attractive method in the study of tubal patency reliable, reproductible, minimally invasive, minimally invasive and inexpensive.

Objective :
- Define for each exam (TUCE, HSG and laparoscopy), its sensibility and specificity for the evaluation of tubal patency in infertile women.
- Clarify the feasibility, tolerance and complications of TVU compared to other investigations,

Patientes and methods:
This is a prospective study analyzing the results of 40 hydrosonographies made in the “C” department of the Center of Gynecology and Obstetrics of Tunis (CMNT). This study extends over a period of 6 months from the first January 2013 to 30 June 2013.

Resultats :
The average age of our patients was 32 years. The majority of women consulted for primary infertility (75%). The tolerance of the transvaginal ultrasound with contrast enhancement (TUCE) was often good, the pain assessment was subjective without using a ladder or evaluation score. We compared the data of TUCE to those of HSG, and especially to laparoscopy which is nowadays the gold standard in female infertility.

The comparison TUCE / HSG has allowed us to draw the following conclusions:
- The concordance observed in the study of the right tubal patency was 67.5% (Kappa = 0.28)
- * The HSG has entered a false diagnosis of right tubal obstruction in 7 cases; this may be due to tubal spasm or a technical failure.
- * The concordance observed in the study of left tubal patency was 62.5% (Kappa = 0.23).
- * The concordance observed on the bilateral agreement permeability was: 57.5% (Kappa=0.15).

Discussion :
- Darwish** (N=83) concordance 72.4% for right tubal obstruction et 60% for left tubal obstruction.
- J P Bernard*: TUCE can be used as a screening test rather than a real competitor tubal disease HSG

Conclusion
The hydrosonography has the advantage of being reliable, minimally invasive, reproductible and inexpensive. It remains a screening exam in female infertility. It should be prescribed as first-line exam and can lead to more aggressive and invasive complementary examinations to complete the study of tubal patency.