

A NEWER APPROACH TOWARDS FALLOPIAN TUBE PATENCY BY ULTRASONOGRAPHY & ITS COMPARISON WITH HYSTEOSALPINGOGRAPHY AND LAPAROSCOPIC CHROMOPERTUBATION

M.C. TAORI ● U.S. GUHE

J.I. FIDVI ● S.V. CHANDAK

SUMMARY

Recently a newer approach to know about fallopian tube patency is by Ultrasonography (USG) which is more safe, noninvasive and economical as compared to Hysterosalpingography (HSG) and Laparoscopic chromopertubation.

In the present study 50 cases of sterility are preselected, all had undergone Ultrasonographic tube patency, HSG & Laparoscopic chromopertubation. Though HSG and Laparoscopic Chromopertubation are age old conventional techniques for tubal patency, newer technique is by USG, where preselection of cases is done with no free fluid in pouch of Douglas (P.O.D.) Normal saline (20-30 cc) injected transcervically and free fluid collection if seen in P.O.D. indicating unilateral or bilateral tubal patency and if not seen indicates bilateral block.

INTRODUCTION

Tubal factor as a cause of infertility accounts 30-40%. Various techniques are described to study tubal patency. Important one are HSG and Laparoscopic chromopertubation for tubal patency which are conventional techniques. A new technique is by USG. No literature is available on this technique except on article by Sharma 1989

HSG is radiographic visualisation of Uterine Cavity, fallopian tube and its patency after

injection of contrast media transcervically.

MATERIAL & METHODS

In the present study, 50 cases of infertility were taken which included cases of both Primary and Secondary sterility. All had undergone HSG, Laparoscopic chromopertubation and USG.

In HSG dye used was conray 420 or Urograffin. In laparoscopic chromopertubation Methylene Blue was injected transcervically. in USG tube patency was done by Real B Mode USG Scan. Procedure is as follows :

1. Routine Pelvic (Gynaecological) Scan with

- full bladder performed. Preselection of cases with no free fluid in P.O.D. was done.
2. Per Speculmu (P/S) and Per Vaginal (P/V) examination was done.
 3. 20-30 c c of normal saline injected transcervically using Leish Wilkinson's Canula.
 4. Scanning repeated after injecting normal saline.
 5. Fluid collection in P.O.D. noted indicating Unilateral or Bilateral tubal patency. If there is no collection of fluid seen, it indicates bilateral block.

because irritation by contrast media can reflexly cause uterotubal spasm at cornual end in HSG, while in USG normal saline is used which is not irritant to mucosa.

CONCLUSION

1. Tubal factor is important cause of infertility.
2. Tubal patency can be performed by HSG, laparoscopic chromopertubation & USG, results obtained are comparable.
3. Here though USG is a very recent technique and it does not determines the site and side of Block, but it does not matter much as ovum is

TABLE I

Showing Comparison of Tubal Patency by HSG, Laparoscopic Chromopertubation & USG

Result	HSG	Laparoscopy	USG
Bilateral Patency	48%	64%	64%
Bilateral Block	34%	28%	36%
Unilateral Block	18%	8%	Not Assessed

OBSERVATIONS

Results of Tubal Patency by HSG and Laparoscopy could be obtained, which determines the site and side of tubal block. But in USG it decides whether there is Unilateral, Bilateral patency or Bilateral Block, by demonstrating fluid or no fluid in P.O.D.

In USG though site and side of Block could not be made out, false Negative results are less

known to be released alternately from each side.

Thus USG is superior to HSG and laparoscopy as it is non-invasive, economical and technically simple with less false negative results. Any obvious uterine or ovarian factor can also be demonstrated by U.S.G. in the same sitting.

REFERENCES

1. Sharma R.P. : *The Journal of Obst. & Gynaec of India*, 39: 700: 1989.