

ORIGINAL RESEARCH

Evaluation of Complication and Spontaneous Conception Rate after Hystero-Contrast Sonosalpingography

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ABSTRACT

Objective:To evaluate the complications and spontaneous conception rate after Hystero-contrast sono-salpingography technique for tubal patency test. **Methods:**Telephonic survey was conducted from 2018 to 2022 at noble diagnostic centre Anantnag, Kashmir. 500 patients who have undergone Hystero-contrast-sonosalpingography were surveyed telephonically at different times from date of examination, data regarding procedure tolerability and conception rate were recorded. **Results:**Procedure is well tolerated with average pain score of 1.3 ± 0.7 . Fertility rate was increased, 24% of patients conceived within first three months of procedure. **Conclusion:** Our study suggests that HyCoSy is safe and well tolerated procedure with increased fertility rate, therefore HyCoSy should be included as first step in evaluation of female infertility.

Keywords: Hystero-contrast-sonosalpingography, spontaneous conception, infertility and pain.

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INTRODUCTION

Hystero-contrast sono-salpingography is an ultrasound-based test for examining uterine cavity, myometrium, fallopian tubes, ovaries and pelvic peritoneum¹. Hystero-contrast sono-salpingography (HyCoSy) unlike Hystero-salpingography (HSG) does not use radiation and avoids Iodine based solution that can cause iodine allergy in some patients. HyCoSy is contraindicated in patients with pelvic infection and pregnancy.²

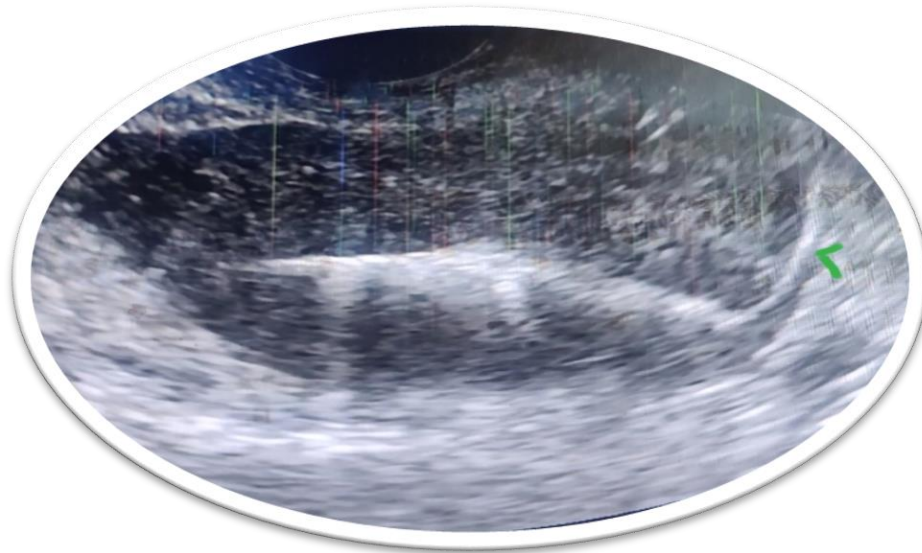
AIMS AND OBJECTIVES

To evaluate complications and spontaneous conception rate after Hystero-contrast sono-salpingography.

MATERIAL METHODS

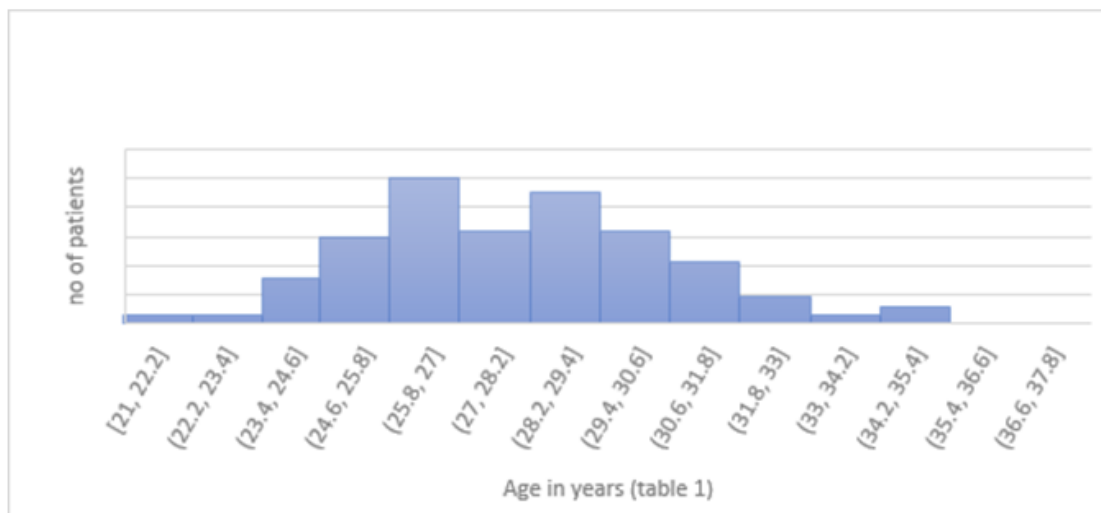
Study was conducted at Noble diagnostic center Anantnag, Jammu and Kashmir from 2018 to 2022,

total 1110 HyCoSy's were done on patients with primary and secondary infertility. All the patients with Tubo-ovarian mass, hydrosalpinx, ovarian cysts and PID were excluded from study. In our technique small 4fr catheter with malleable sheath was introduced through cervix balloon of catheter was inflated with 2cc air to keep catheter in place and to avoid fluid leak, 21 cc of solution prepared by mixing 5cc metronidazole, 5cc ciprofloxacin and 1 cc of dexamethasone was pushed through catheter for visualization of endometrial cavity followed by 3cc of air as contrast for visualization of fallopian tubes, appearance of air around ovaries was taken as positive tubal patency test. Data was gathered by telephonic survey at different times from examination date. Procedure tolerability was evaluated by analogical pain scale with score of 1 (low) and 10 (high). Pain, pregnancy rate and other procedure related complications were recorded.

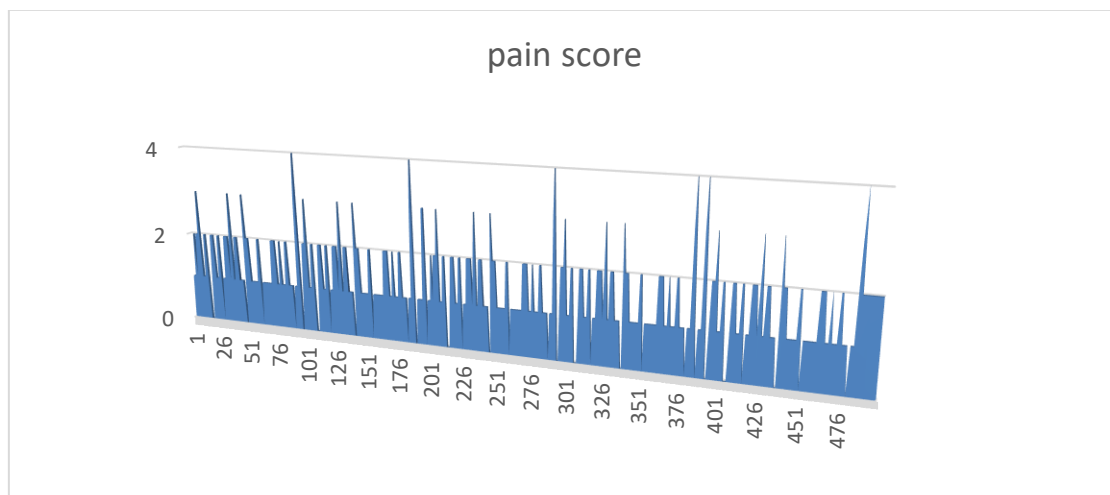


RESULTS

Out of 1110 patients only 500 participated in telephonic survey (45%). Median age at the time of HyCoSy was 28 ± 2.7 yrs.

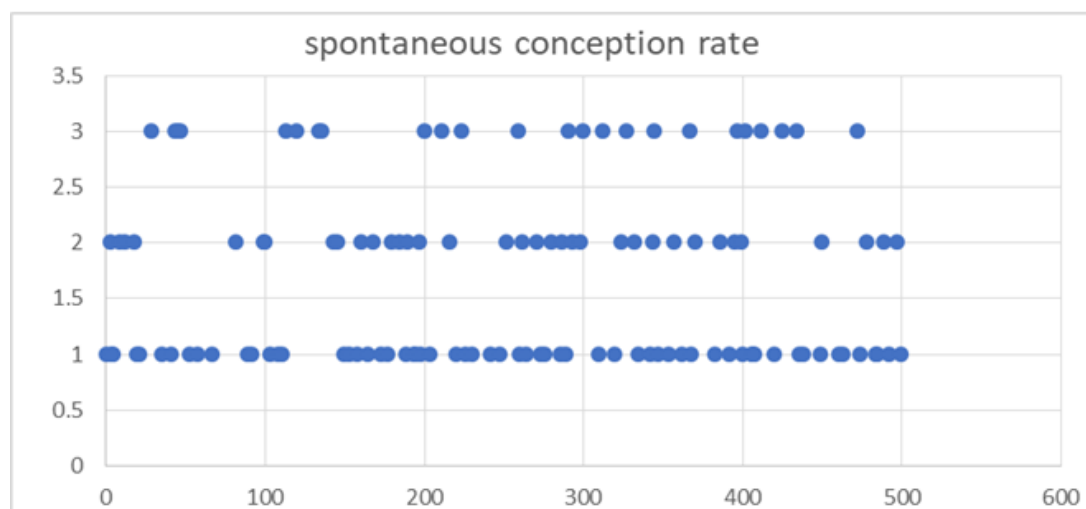


Duration of telephonic survey from date of examination was 12 months. Patient tolerability for HyCoSy was with average pain score of 1.3 ± 0.7 . table 2.



10 out of 500 patients (2%) reported complications including 6 patients (1.2%) with moderate pelvic pain, 4 patients (0.8%) with persistent vaginal bleeding in days following examination.

121 spontaneous pregnancies occurred (24%) among patients willing to conceive within first three months of procedure, out of 121 pregnancies 60 spontaneous pregnancies (12%) occurred in same cycle after procedure. Table 3.



The infertility related average length of time before HyCoSy was 34.7 ± 3.7 months.

DISCUSSION & CONCLUSION

Our study has shown that HyCoSy was tolerated well by most of the patients with average pain score of 1.3 ± 0.7 , Which is in agreement with study conducted by L. Savelli, Guerrini et al. Tablet brufen 400mg was given to all the patients one hour before procedure.³ Out of 500 patients, 121 (24%) achieved spontaneous pregnancy within first 3 months after HyCoSy, similar observations were made by Gao Chunyan and Peng Bin et al. Reason for increased conception rate after HyCoSy can be due to forceful passage of contrast and fluids through fallopian tubes resulting in dislodgement of small mucous plugs and possible break down of small adhesions within fallopian tubes.⁴ Mild to moderate bleeding was reported by Seven patients (1.4%) which was controlled by prescribing tablet tranexamic acid 500mg, similar findings were reported in study conducted by Luca Savelli M. Det al.⁵

Our study has proven that HyCoSy is safe and well tolerated procedure. 24% of patients have conceived 6. .2008.

spontaneously within first six months of procedure, therefore we suggest HyCoSy to be first step procedure in evaluation of infertile women.

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