

Hysterosalpingography as a Diagnostic Tool in patients with infertility

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To evaluate the role of HSG as a diagnostic tool in a tubal factor infertility. HSG was performed on 100 infertile patients after excluding other causes of infertility. Tubal factor was found in 34% of patients as a cause of infertility.
Key words: Infertility, tubal factor, hysterosalpingo-graphy.

Infertility is a world wide problem and carries a social stigma in many countries¹. In the female genital tract cervical, uterine, ovarian and tubal factors could be a cause of infertility. In developing countries tubal damage following post abortal, purperal sepsis, STDs & Pelvic T.B remains an important cause of tubal damage². HSG is the traditional way to assess the uterine cavity and tubes for their structure and function³. In developed countries endoscopic procedures like laparoscopy, hysteroscopy, fallopscopy have replaced HSG⁴. In our country where facilities for such procedures are not freely available HSG remains an important diagnostic tool. This study was conducted to evaluate the role of HSG as a diagnostic tool in evaluation of infertile patients.

Patients and methods:

This study was conducted in the Department of Obstetrics & Gynaecology of Fatima Jinnah Medical College/ Sir Ganga Ram Hospital Lahore over a period of one year, from November 2004 to October 2005 on 100 infertile patients attending Gynae OPD.

Detailed history, examination, relevant baseline and specific investigations were carried out. Patients with male factor infertility and obvious hormonal problems were not included in the study. Patients with active genital tract infection were also not included in the study.

HSG was done on 100 selected cases on day 9-11 of menstrual cycle using a lipid soluble radio opaque dye in the radiology department of Sir Ganga Ram Hospital. Data was collected on specially designed performa and analysed by using SPSS version 10.

Results:

One hundred patients with infertility meeting the inclusion criteria were included in this study. Out of 100 cases 42% were of primary infertility and 58% were of secondary infertility. Tubal factor infertility was identified in 34% of patients. Table I shows HSG findings in study population.

Table I hystero-salpingography findings in study population.

Findings	=n	%age
Hydrosalpinx (Unilateral: 4, Bilateral: 5)	9	9
Beaded appearance	4	4
Cornual end blockade (tubes not outlined)	17	17
Absent tubes because of previous surgery	4	4
Normal HSG	66	66

Among 34 patients with tubal factor infertility 9(26.47%) had primary infertility and 25(73.52%) had secondary

infertility. Regarding their socio-economic status 4 (11.76%) belonged to middle class and 30(88.23%) belonged to poor class. 17(50%) has past history of post abortal infection, 8(23.52%) had history of puerperal sepsis, 9 (26.47%) had past history of T.B.

Discussion:

Infertility is a problem which effects woman's social and psychological health. In countries like Pakistan tubal damage secondary to post abortal sepsis, purperal sepsis and genital tract Tuberculosis remains an important cause of infertility⁵. These are preventable causes of tubal damage. Their incidence can be reduced by improving the standards of antepartum and intrapartum care and by making sure that all pregnancy related problems are dealt with by trained medical personnel. In this study tubal factor was found in 34% of patients. Similar results have been shown by Chaudhary⁶. In this study 17% of patients showed normal histogram but their fallopian tubes were not outlined. This could be either due to bilateral cornual end blockade secondary to infection or due to spasm of the fallopian tubes. These patients need further evaluation by means of laparoscopy. Evaluation of tubal function by endoscopic technique requires expensive instruments and highly skilled staff and facilities for this procedure are available only in tertiary care hospitals. This study shows that HSG still remains an important diagnostic tool, in our set up, as it is not expensive, easy to perform, and does not require highly skilled persons³.

Conclusion:

HSG can be used as a primary diagnostic tool for evaluation of infertile patients and only selected cases should be referred to tertiary care hospitals for diagnostic endoscopic workup.

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