Inadverent Hysterosalpingogram Leading To Pregnancy Loss: A Case Report

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ABSTRACT: Hysterosalpingogram(HSG) is the basic investigation in an infertility workup. Here we report a case where HSG was done in a patient of infertility on day 14 of her last vaginal bleeding assuming it to be her normal menses without ruling out pregnancy. Filling defect was reported as myoma. The end result was an abortion of the precious pregnancy.

KEY WORDS: hysterosalpingogram, infertility, menses, pregnancy, myoma, abortion, precious.

I. INTRODUCTION

Hystererosalpingogram(HSG) is a first line investigation in an infertility workup. It is a radiographic demonstration of the uterus and fallopian tubes by injection of the contrast media through the cervical os under fluoroscopic monitoring. It demonstrates the uterine cavity, the lumen course and the tubal patency. It is usually performed post menstrually but patients with infertility do present with irregular menstrual cycles so menstrual history cannot be solely relied on. Sometimes decidual bleeding may be assumed as normal menses and HSG may be inadvertently performed in a patient having undetected pregnancy as happened in our case.

CASE REPORT : A 21 year old nulliparous lady presented in the opd with complains of bleeding p/v FOR seven days.Patient gave history of infertility for one year and was investigated for the same by a private practitioner. She had previous normal menstrual cycle and underwent HSG on day 14 of her cycle assuming the her last vaginal bleeding to be normal menses. No pregnancy test was done before the procedure. HSG illustrated a large endometrial cavity with a filling defect which was reported as a myoma (fig 1). Patient had bleeding two days after the procedure and so she reported to us.Pregnancy test was done which was positive and pelvic ultra sound revealed incomplete abortion.

II. DISCUSSION

Few cases have been reported worldwide regarding unsuspected pregnancy during HSG. The prevalence rate reported by Justensen et al (1986) was 0.6%(3). The occurrence of early pregnancy bleeding, which could be mistaken for a menstrual cycle is a major drawback of using menstrual cycle dates to exclude pregnancy. American College of Radiology recommends HSG to be scheduled on days 7 to 10 of the menstrual cycle(1).By comparison ,American College Of Obstetricians and Gynaecologists recommend the procedure to be performed during days 1 to 14 of the menstrual cycle and does not suggest routine pre procedural pregnancy sereening(2). Early pregnancy bleeding has been reported to occur in upto 9% of women during first 8 weeks of pregnancy(4).A Human chorionic gonadotropin assay with a detection limit of 25mIU/ml in urine has been estimated to detect pregnancy approximately 3 to 4 days after implantation(5), and implantation has occurred in 96% of patients by 4 days after the first day of the missed period(6). Therefore ,urine pregnancy testing would be expected to accurately detect the majority of pregnant patients who mistook early pregnancy bleeding at the time of menstrual cycle for a menstrual bleed .Also, a urine pregnancy test prior the procedure seems cost effective even in our settings.Radiological feature which may alert one to an unsuspected pregnancy during HSG is decidual opacification associated with water contrast medium infiltrating the decidual lining producing the double -contoured image termed double outlined uterine cavity(DOUC) ,first described by Slezak et al(1968)(7). This case report showed miscarriage as the outcome which is difficult to state if it occurred as a result of the potential irradiation effect as successful pregnancy outcome has been reported post HSG(8). Disruption of pregnancy due to the flushing effect of the contrast media could be another possible explanation.

III. CONCLUSION

Caution must be taken while performing HSG by keeping a high index of suspicion, meticulous history taking and a urine pregnancy test prior to the procedure. Wastage of the precious pregnancy is a huge loss for the couple as well as the treating physician.

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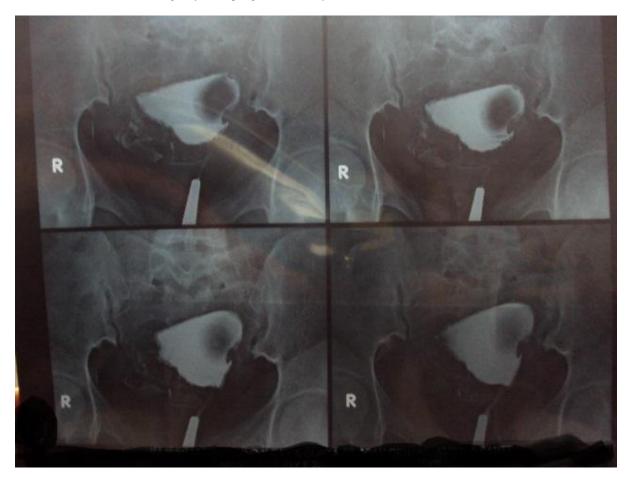


Fig 1 HSG film showing the gestational sac which was reported as myoma.