Pregnancy Loss: A Rare Consequence of Premenstrual Endometrial Curettage for Infertility Management

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Abstract

Two cases of pregnancy loss - a rare complication of pre-menstrual endometrial biopsy (PMEB) are reported. PMEB is an investigation performed for infertile women to assess ovulation and endometrial factors. It is usually performed during the secretory phase of the cycle. This implies that ovulation and possibly fertilization may have taken place.
In the two patients presented, histology report in one suggested pregnancy while the second presented with massive vaginal bleeding few days after PMEB requiring evacuation. The histology of the latter confirmed products of conception.
Though PMEB is useful, it may lead to pregnancy loss. Couples should be counseled to avoid sex during the fertile days of the cycle scheduled for PMEB investigation. Wider availability and use of ultrasonography to assess ovulatory factor may avert this painful complication.

Key Words: Pregnancy, Abortion, Infertility, Curettage [Trop J Obstet Gynaecol, 2005, 22: 74-75]

Introduction

Three basic investigations commonly constitute the initial investigative protocol for infertility management in many centres of the developing countries, viz-Semen analysis for the assessment of the male partner; Hysterosalpingography or Laparoscopy and dye-test to assess tubal patency status and Endometrial biopsy and histology for the assessment of ovulatory function and endometrial status[1].
The histological assessment of the premenstrual endometrium of infertile women is very popular in developing countries because of its relative cheapness and availability[2]. Further more, it will give information on the infection status of the endometrium and especially diagnose chronic endometritis commonly found among infertile women in developing countries[3,4]. Endometrial biopsies can be performed without anaesthesia and in the out patient clinic using Karman's Cannula and Suction Syringe[5]. We present two cases of inadvertent termination of pregnancies resulting from pre-menstrual endometrial curettages-one for the evaluation of infertility and other for the treatment of chronic endometritis.

Case 1

Mrs. O.F., a 34 year-old school teacher, Para 2^{+0} one alive, presented at the gynaecological clinic of our hospital with a four-year history of secondary infertility. Following thorough clinical examination, hysterosalpingography and semen analysis of the husband were performed. The hysterosalpingogram and semen analysis results were essentially normal. The pre-menstrual endometrial biopsy result however read- "...Fragment of endometrium showing marked decidual transformation of stroma, suggestive of pregnancy".

Case 2

Mrs. C.A. is a 26 year-old house wife, Para 1^{+0} one alive, who presented at the gynaecological clinic of our hospital with secondary infertility of 3 years duration. Following clinical evaluation, she also had the 3 basic infertility management investigations- Pre-menstrual endometrial biopsy, Hysterosalpingography and Semen analysis of her husband. The later two were essentially normal, pre-menstrual endometrial biopsy histology report read in conclusion: "1. Secretory endometrium. 2. Chronic endometritis (Moderately Severe)"
Ultimately she had endometrial curettage (Scrapping), Steroids (Prednisolone) and antibiotics for the treatment of the chronic endometritis. She started spotting blood nine days after curettage and by the 14^{th} day had a massive vaginal bleeding requiring resuscitation at the hospital. Vaginal examination revealed blood clots. The cervical os was patulous and the uterus normal-sized but soft. She was taken to the theatre and the uterus evacuated. The histology report of the evacuated specimen read in summary, "Histologic features suggestive of aborted pregnancy".

Discussion

The 2 cases reported represent unfortunate incidences of pregnancy loss following pre-menstrual endometrial curettage. Although some deleterious consequences have been reported following endometrial biopsies for fertility evaluation such as post endometrial biopsy spotting, luteal phase shortening[6], etc. Pregnancy loss as a consequence of this procedure undoubtedly constitutes a problem of greater magnitude because of

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its psychological and even legal implications on the patient and her doctor alike.

The Doctor is often at loss on how to explain what had happened to the patient because of the perceived difficulty in predicting her reaction. Patients' reaction to the situation varies depending on psychological constitution of the individual. The patient in Case 1 exhibited obvious disappointment and despair. She left and never showed up again at the clinic. The patient in Case 2 insisted on explanations as to the cause of her embarrassing bleeding. She took the explanation with equanimity. Fortunately, she missed the next period and was confirmed pregnant soon after.

Ovulation usually occurs mid-cycle and the likelihood of pregnancy resulting from sexual intercourse during this time is very high. It is curious why a hitherto infertile woman would suddenly "decide to" become pregnant at the month when endometrial biopsy test is scheduled. It is possible that such women belong to the group of 'unexplained' infertility. Perhaps, the visit to and the 'kind words' from the Doctor may have constituted a psychological trigger towards conception in the absence of any medical intervention.

Endometrial biopsies are a very important fertility evaluation procedure especially in developing countries where alternative methods of ovulatory function assessment such as follicular tracking with ultrasound and hormone assay are out of reach of most patients and medical practitioners, and also where there is need to rule out the presence of chronic endometritis which has a high incidence in developing countries[3]. Perhaps the best way out of this embarrassing inadvertent pregnancy wastage is to advice the couple against sexual intercourse during the 'unsafe' days of the menstrual cycle of the scheduled month of endometrial biopsy. Endometrial curettage for the treatment of chronic endometritis should not be performed during the secretory phase of the menstrual cycle to avoid the disturbance of a budding conception.

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