

# Uterine Perforation following Induced Second trimester Abortion in an Adolescent

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## Abstract

We report a case of a 19 year adolescent, who underwent unsafe induced abortion at 14 weeks of pregnancy followed by continuous pain and fever discovered at laparotomy to be due to uterine perforation with the findings of product of conception along with flat bone popping through a uterine rent in anterior and lower part of the uterus within the vicinity of uterovesical which was repaired with good outcome.

**Key Words:** Unsafe abortion, septic abortion, uterine perforation.

## Introduction

Uterine perforation leading to intraperitoneal or vaginal bleeding occur while emptying the uterine contents, in induced abortion performed as an elective abortion for medical termination of pregnancy or when illegally performed as a criminal abortion<sup>1-4</sup>. There are documentation of safe second trimester procedures even in scarred uterus while perforation are seen in first trimester induced abortion performed surprisingly, as an elective procedures by using recommended technique like MVA endorsing plastic cannula.<sup>4-6</sup> We describe one such case of uterine perforation which was diagnosed and managed on 10th day following clandestine procedure somewhere in Kathmandu valley, in an adolescent for 14 weeks of pregnancy.

## Case

A regularly menstruating 19 year adolescent, unmarried but indulged in unprotected sexual activity missed her period almost for 3 months [LMP-?-April/May-2013 or Baishak-2070]] and found out that she tested positive for on pregnancy kit at home. She went to local medical shop for termination of pregnancy where some oral medications was given and then surgical curettage was done on 11-September-2013(26-Bhadra-2070). She was under observations over night and was discharged the next day. She started having continuous pain lower abdomen aggravating on moving and relieving on rest and was associated with fever (maximum up to 101° F) with chills and rigor. There was vaginal bleeding necessitating changing of 3-4 pads/day that ended in foul smelling vaginal discharge.

For this she attended Emergency Department of Tribhuvan University Teaching Hospital after nine days of interference. On examinations, she was pale, blood pressure was 90/60 mm Hg, pulse rate was 120/min and respiratory rate was 18/min. There was abdominal distension, tenderness, guarding and rigidity in all quadrants. Per speculum examination revealed product of conception like material hanging through Os with minimal bleeding and uterus was 14 weeks size, soft, and non-tender with bilateral free & non tender fornices.

On investigation, haemoglobin was 8.7 gm%, total WBC count was 17,000 cumm with 89% neutrophils. All other hematological investigations, including blood biochemistry was within normal limits. USG abdomen showed uterus 15x 16 cm with minimal hyperechoic foci with dirty posterior shadowing in the lower uterine cavity with extension of foci through left anterior lateral wall, likely indicating a full thickness uterine perforation with adjacent anechoic collection of 10 ml without any significance of intrauterine collection. Xray chest showed gas under the diaphragm with non-distended bowel loops and with the ultrasound diagnosis of uterine perforation, was taking for exploratory laparotomy. On opening the abdomen, 50 ml of blood stained fluid was noted in the peritoneal cavity. Uterus was enlarged to 14 weeks size and a rent about 4x4 cm was seen on the left lower uterine segment involving the margin of vesico-uterine fold of peritoneum from



where minimal oozing was present (fig.1). About 5 gm POC like materials was seen to be protruding through rent along with one small flat bone, which was removed. Bilateral tubes were swollen and bilateral ovaries were normal. Bowel loops were normal. Margins of the uterine rent was freshened and abdominal washing completed leaving a tube drain before finally closing the abdomen in 2 layers.

Post operatively she received one unit of whole blood, analgesics; intravenous antibiotics (cephalosporin and metronidazole) for 48 hours followed by oral antibiotics. Post operatively hemoglobin was 9.8 gm/dl, WBC-21300 cu mm, neutrophil 92%. Foley's catheterization was kept till 10<sup>th</sup> post-operative day. Abdominal drain was removed on fourth post-operative day. The peritoneal fluid culture showed no growth and culture of product of conception showed *E. coli* and *Klebsiella pneumoniae* sensitive to cephalosporin. On 6<sup>th</sup> / 7<sup>th</sup> PO days she developed low grade fever which subsided after 48 hours and was later discharged after stitch removed on 10th PO day.

## Discussion

This is an example of induced unsafe abortion complications from the heart of the capital, none the less similar result is projected from rural Nepal where 52% maternal illness were attributed by abortion-related complications from a study in eight districts during 2008–2009. This indicates that unsafe abortions are usually carried out by unqualified practitioners /provider on illiterate people at substandard centers /health facilities to terminate unwanted illegal pregnancies for the purpose of concealment of the truth as in afore mentioned case of teenagers, in single status.

Direct trauma to the uterus from the instrument may cause perforation and this may lead to severe abdominal pain, abdominal distension, fever with chills and rigor, severe anemia, vomiting and diarrhea, as met in our case. Also, the second trimester abortions have greatest risk of serious complications, including perforations, uterine perforation,

pertaining to larger amount of POC in bigger uterus. Termination of the second trimester could have been made safer by adopting cervical dilators or misoprostol in better set up, with facility for diagnosis like ultrasound or laparotomy for treatment.

Sonography and X-ray have been appropriately implicated in the diagnosis, whenever the clinical examinations have been difficult on account of pain and abdominal distension.<sup>7</sup> This adolescent was made aware of the slightest future possibility of endometriosis and the fact that the repaired rent could give away during pregnancy resulting in the hemoperitoneum and cautioned symptoms for timely medical attention.<sup>1,8,9</sup>

## Conclusions

Unintended second trimester abortion in adolescent should be terminated in a well-equipped facility by trained professional to avoid uterine perforation or if it did occur at all by timely laparotomy.

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