



A Case Report On: Incomplete Abortion with Chronic Hypertension

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Authors' contributions

This work was carried out in collaboration among all authors. All authors read and approved the final manuscript.

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Case Study

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ABSTRACT

Introduction: Abortion is a distressing experience that affects the mother in a variety of ways by influencing on emotional status that can finally result in psychological disorders such as depression [1]. An incomplete abortion occurs when the products of conception are lost in the first 20 weeks of pregnancy. Moderate to severe vaginal bleeding, as well as lower abdomen and/or pelvic pain, are common symptoms of incomplete abortion [2]. Substantial evidence indicates that women with a history of spontaneous abortion have a greater risk of non-communicable diseases, including hypertension, cardiovascular diseases, and type 2 diabetes [3]. In low and middle-income nations, abortion is one of the most common causes of maternal death [4]. In general, incomplete abortions are unavoidable, with chromosomal abnormalities accounting for 50% of all occurrences. Age, maternal disorders (diabetes, hypertension, renal disease, thyroid issue, polycystic ovarian syndrome, lupus, thrombophilia), under or overweight, aberrant uterus, teratogen exposure (drug, alcohol, caffeine, radiation), and infections are all changeable etiologies and risk factors (human immunodeficiency virus, sexually transmitted infections, *Listeria monocytogenes*) [2].

Presentation: A 30-year-old woman's case study with 15 weeks pregnant admitted in the obstetric and gynecological unit on the date 11 June 2021 with complaints of amenorrhea since 4 months, bleeding per vaginam, passage of clots, blurring of vision, pain in abdomen, breathlessness and

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her blood pressure was noted as 140/100mm of Hg. Interventions: Generally, the patient with abortion and raised blood pressure is hospitalized and care is provided in the obstetric and gynecological unit or ward. The goals during this phase are saving a life of mother, maintaining and restoring hemodynamic stability and preventing the spread of infection or correcting the complication.

Outcomes: During the period of five days treatment, the client was having raised blood pressure but significantly the client's health was improved with further treatment and management. After a hospital stay of five days the markable progress was seen further before returning to the home. **Discussion:** Although the patient reacted well to treatment, more interventions and health education could be used in the future to help the patient to achieve the better health results.

Keywords: Abortion; blood pressure; amenorrhea; hemodynamic.

1. INTRODUCTION

Abortion is a distressing experience that affects the mother in a variety of ways by influencing on emotional status that can finally result in psychological disorders such as depression [2]. Abortion is the removal of an embryo or foetus weighing 500 gms or less from its mother when it is not capable of independent living (WHO). Abortus refers to the embryo or foetus that has been removed [5]. An incomplete abortion occurs when the products of conception are lost in the first 20 weeks of pregnancy. Moderate to severe vaginal bleeding, as well as lower abdomen and/or pelvic pain, are common symptoms of incomplete abortion. It is important to diagnose this early to make sure the patient expels all products of conception [2]. It is estimated that 15.6 million abortions take place in India every year [6].

Globally hypertension is the most frequent medical complication of pregnancy, occurring in 10% of pregnancies and includes a range of conditions, including chronic hypertension, gestational hypertension (GH), and preeclampsia [7]. Women whose blood pressure is high before they are pregnant may be at increased risk for miscarriage [8]. Epidemiological studies have revealed that Hypertensive disorders of pregnancy is positively associated with the risk of future chronic disease, for example, heart failure, dysrhythmia, stroke, hypertension, diabetes mellitus (DM), end-stage renal failure etc. [9]. Substantial evidence indicates that women with a history of spontaneous abortion have a greater risk of non-communicable diseases, including hypertension, cardiovascular diseases, and type 2 diabetes [10].

Hypertensive disorders during pregnancy leads to several maternal complications including eclampsia, HELLP syndrome, cerebral

haemorrhage, liver rupture, cortical blindness, pulmonary oedema, placental abruption, cortical blindness and renal failure. Furthermore, intra-uterine growth restriction, preterm delivery and still births are observed adversities to the fetus [11].

In low and middle-income nations, abortion is one of the most common causes of maternal death [12]. Genetic diseases and chromosomal abnormalities were shown to be the cause of abortion in more than half of the instances. Approximately, one-third of these or 75 million pregnancies ends in stillbirth, spontaneous or induced abortions [2].

A high number of women die worldwide as a result of birth and pregnancy-related problems, with approximately 99.0% of maternal deaths occurring in low- and middle-income countries [13].

2. CASE HISTORY: PATIENT INFORMATION

A case study of 30-year-old lady with 15 weeks pregnant admitted in the obstetric and gynecological unit on the date 11 June 2021 with complaints of amenorrhea since 4 months, bleeding per vaginam since 1 day, passage of clots since few hours, blurring of vision since 1 hour, pain in abdomen since 1 day, breathlessness since 1 day and her blood pressure was noted as 140/100mm of Hg. The patient was having above symptoms so she was admitted to Acharya Vinoba Bhave hospital for further treatment.

2.1 Medical History

The patient was given tablet amlodepine 5mg orally OD, tablet misoprostol 200mg orally in stat dose along with zonac suppository P/R stat.

2.2 Surgical History

Under all aseptic condition with the consent of mother and her family an abortus expelled on 11 June 2021 at 1.30pm of 10*5cm in size with blood clots and minimal blood loss, hemostasis was achieved and the patient shifted to ward. Abortus was sent for histopathology examination.

2.3 Psychosocial History

She maintains good interpersonal relationships with the family members, neighbours, friends and relatives.

2.4 Environmental History

Patient home surrounding environment is good. There is facility of a closed drainage system and proper disposal of waste.

2.5 Physical Examination

General parameter- Height: 156 cm, Weight: 56 kg, BMI: 35kg/m²

Vital sign: Temperature: 98.6⁰ F, Pulse rate: 95 beat / min,

Respiration: 22 breath/min, Blood pressure: 140/100 mm of Hg

Mental status: She was conscious and she had a Glasgow Coma Scale of 15.

Pulmonary/cardiovascular: The patient was tachycardic with a respiration of 22 breaths per minute with no evidence of airway compromise.

Musculoskeletal system: She was obese and a BMI of 35kg/m². The range of motion (ROM) is normal.

Speech: ability to talk. Sound is present

Chart 1. Significant medical timeline

Time	Problem	Place	Action/progress
11 June 2021	Bleeding p/v, chronic BP, abdominal pain, blurred vision, breathlessness	Hospital	Symptomatic treatment, abortus expelled.

3. DIAGNOSIS ASSESSMENT

Blood investigation : In CBC Hemoglobin is 11.7 mg/dl(13-16mg/dl), mean corpuscular hemoglobin concentration is 34.5 g/dl , Mean corpuscular volume (MCV) is 84.1 fl (78-98 fl) , total RBC count is 4.03m/ul, WBC is 13600 (4500-11,500 k/ul) ,platelet count is 1.59/ml (150,000 to 450,000) , Hematocrit (Hct) Levels is 33.9% (37 %-47%), monocytes is 04% (00-15%), Granulocytes is 85 % ,Lymphocytes is 10%(20%-40%) , red cell distribution width (RDW) is 14.2 (11.6-14.8) ,Eosinophils is 01% (1-5%) basophils is 00% (0-1%).

In KFT urea is 19 (9.81 – 20.1 mg/dl) , creatinine is 0.6mg/dl (0.7-1.4 mg/dl) ,sodium is 145meq/l(135-145meq/l) , potassium 4.3(3.5-5.5 meq /l) ,.

In LFT alkaline phosphates is 67 (32-45g/l), Alanine transaminase (ALT) is 38IU/L (0-50IU/L), aspartate aminotransferase,(AST) is 41 IU/L (10-40 IU/L) ,total protein ia 7.6 (23-38 g/dl) ,total bilirubin is 0.8 g/dl (1-1 g/dl) ,conjugated bilirubin is 0.2 mg/dl (0-0.25 mg/dl) ,unconjugated bilirubin is 0.6 mg/dl (0.2-0.7mg/dl) , globulin is 3.4 .

RBS is 120mg/dl,non reactive HBSAG and HCV.

In Urine examination urine albumin is trace, urine sugar is nil, an epithelial cell is 1-2 cell /hpf. Urine ketone is absent, pus cells are plenty of cells/hpf

In peripheral smear, RBC's - normocytic normochromic platelets are adequate on smear, no haemoparasite seen.

USG done: Above F/S/O retained products of conception in uterus with clots in cervix.

4. THERAPEUTIC INTERVENTION

General measures: To check the vital sign (Temperature, pulse, respiration and BP), fluid and electrolyte balance and prevention of complications like a bacterial infection, fluid loss, hypothermia. Health management includes a healthy diet and rest.

4.1 Pharmacological Management

Generally, the patients with incomplete abortion are hospitalized and care is provided in the obstetric and gynecological unit or ward. The goals during this phase are saving life, restoring

hemodynamic stability, to hasten the expulsion process and maintain rigorous asepsis in conduction of labour and promoting the healing and preventing or correcting the complication.

4.2 Fluid Replacement to Prevent Shock

Administration of Ringer Lactate as a intravenous fluid therapy and blood transfusion was done to the patient.

4.3 Monitoring of Laboratory Parameters

Baseline parameters of blood glucose, CBC, sodium, urine examination for albumin and pus cells should also be repeated after the 24 hr.

4.4 Prevention of Infection

Infection control is a major component can be achieved by administration of IV 1.2gm augmentin and IV metronidazole along with practicing the strict aseptic technique.

4.5 Surgical Management

Under all aseptic precautions with the consent of mother, the abortus is removed under general anaesthesia and the products of conception of 10*5cm in size with blood clots were removed with the help of ovum forceps and sent for histopathology. Minimal blood loss occurred and the hemostasis was well achieved.

The patient progressed satisfactorily without outbreaks of fever or changes to other organs or structures. Preoperative care: the routine care given to the client undergoing surgery should be continued. Postoperative care: assessment of bleeding, pain control, monitoring signs of shock, infection.

4.6 Nursing Management

4.6.1 Nursing diagnosis

1. Acute pain related to physiological changes

Goal: level of pain will be reduced as the wound starts healing

Intervention: Determine the location and severity of discomfort, provide comfortable position, relaxation such as meditation, administer analgesics as prescribed.

2. Risk for maternal injury related to surgical procedure

Goal: to reduce risk for maternal injury

Intervention: Monitor vital signs and record increased heart rate, severe headache; evaluate the level of discomfort, monitor and assess blood loss by counting number of pads used, advice client to report symptoms indicating complications (e.g. body temperature 100.4⁰F, shivering, fatigue, abdominal pain, severe bleeding, heavy flow with clots, foul smelling)

4.7 Rehabilitation

Rehabilitation of the client: It is essential to consider the mental stress of women as she had lost her child as well as the financial burden due to loss of work, time and lengthy recovery period.

5. DISCUSSION

Abortion is a distressing experience that affects the mother in a variety of ways by influencing on emotional status that can finally result in psychological disorders such as depression [1]. An incomplete abortion occurs when the products of conception are lost in the first 20 weeks of pregnancy. Incomplete abortion is typically accompanied by moderate to severe vaginal bleeding, as well as lower abdomen and/or pelvic pain. In this case, 15 weeks pregnant women was having bleeding per vaginum, passage of clots with pain in abdomen along with breathlessness and blurring of vision.

An epidemiologist done the observational study and utilized data from a study of 1,228 women attempting pregnancy after having previously lost a baby. Of the 797 who achieved pregnancy, 188, or almost a quarter, lost the baby again.

The study, in Hypertension, found no association of blood pressure with the ability to get pregnant. But after adjusting for smoking, body mass index, marital status, education, race and other factors, they found that for each 10-point increase in pre-pregnancy diastolic blood pressure — the bottom number in a blood pressure reading — there was a 17 percent increase in the risk of pregnancy loss.

There are many reasons for miscarriage, and often the cause is unknown. But inflammation and blood vessel impairment, which are

characteristic of hypertension, are also known to be involved in pregnancy loss [8].

A high number of women die worldwide as a result of birth and pregnancy-related problems, with approximately 99.0% of maternal deaths occurring in low- and middle-income countries [4]. I got numerous opportunity to study the situations and provide nursing care as needed. I selected a case with an incomplete abortion and chronic hypertension and provided care throughout her treatment. I provided holistic nursing care for her physical, emotional, social, and cultural needs.

There is an increased risk of maternal death and major complications after 14 weeks of pregnancy. With a adequate workup, close obstetric follow-up, and health education, the prognosis for these individuals is quite good. A physician can remove conception segments at the cervical os with forceps to start the hemostasis process, facilitate uterine contractions, and reduce vagal stimulation in patients with conception segments at the cervical os. Cervical shock will be avoided as a result of this. After the abortion, psychiatry should be consulted to treat feelings of guilt, depression, anxiety, sorrow and post-traumatic stress disorder, which are all usual. Patients who take an active role in their treatment process gets better mentally.

6. CONCLUSION

Abortion is a distressing experience that affects the mother in a variety of ways by influencing on emotional status that can finally result in psychological disorders such as depression [1]. Close obstetric follow-up, client education and active role of the individual can help these clients to have a positive prognosis.

At the end, the patient was discharged. After treatment, the patient improved functionally, psychologically and physically. After a hospital stay of five days the markable progress was seen further before returning to the home.

CONSENT

As per international standard or university standard, mother's written consent has been collected and preserved by the author(s).

ETHICAL APPROVAL

As per international standard or university standard written ethical approval has been collected and preserved by the author(s).

COMPETING INTERESTS

Authors have declared that no competing interests exist.

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