



Case Study

Case of Septic Abortion: A Double Trouble

Dalia Rafat*, Noor Afshan Sabposh, Seema Hakim and Tamkin Khan

Department of Obstetrics & Gynaecology, J N Medical College & Hospital, Faculty of Medicine, Aligarh Muslim University, Aligarh, UP, India-202002

**Corresponding author*

A B S T R A C T

Keywords

Abortion,
Sepsis,
Illegal

The main objective of this study to sensitize about an issue of reproductive health which is most controversial and carries the heaviest burden of stigmatization is abortion. Although abortion services in India were liberalised more than 3 decades ago, access to them remains limited for majority of women. The report of this case of septic abortion is also important at this point of time, when India is going through “A new kind of Abortion War” after introduction of a draft of the Medical Termination of Pregnancy (Amendment) Bill, 2014 by the Union Ministry of Health and Family Welfare. Case Report: A 30 year old female G4P3 L3 with 12 weeks gestation and history of criminal abortion by a quack 10 days back, was brought to us in a moribund state with complaints of fever and pain abdomen. Clinical examination revealed incomplete abortion with features of peritonitis and sepsis. On laparotomy we found pyoperitoneum with uterine perforation and wooden sticks in broad ligament. Hence diagnosis of septic abortion with pyoperitonium was made. Conclusion: Complications of unsafe abortions is a major public health issue among women in developing countries. The consequences of unsafe abortions on women’s health and well being need to be acknowledged by everybody in the society and intensive dissemination of information and commitment at all levels is required.

Introduction

Pregnancy places a woman at some risk for frailty and fatality. Unwanted pregnancy places a woman at additional risk if she seeks abortion as safe services are not often available. This risk may vary from morbidity such as infertility to mortality. Although abortion services in India were liberalised more than 3 decades ago, access to them remains limited for majority of

women. Medical Termination of Pregnancy (MTP) an easy and a safe procedure in trained hands becomes life threatening when performed by untrained personnel. It is estimated by WHO (1994) that in India 70–89 women per 100,000 live births die from unsafe abortions, the risk of death being 1 in 250 procedures.

When the physiological changes attending sepsis are superimposed on the changes characterizing a normal pregnancy, a life-threatening situation may be created, thus leading to double trouble both for the patient and the clinician. Sepsis therefore remains a significant issue for obstetric patients. Maternal resuscitation and early aggressive eradication of the source of sepsis is crucial for successful therapy. Microbiological diagnosis is essential to ensure appropriately guided therapy.

Case Report

A 30 year old female G4P3 L3 presented with complains of pain abdomen since 10 days following criminal abortion by a quack for 12 weeks pregnancy and history of fever since 1 day. On general examination patient was thin built, poorly nourished with severe pallor. Her pulse was feeble (120/min), BP was 94/60 mm of Hg and temperature was 103 F. On abdominal examination, distension was present in lower abdomen with guarding and rigidity. Per speculum examination revealed bleeding through os with foul smelling discharge while on per vaginal examination uterus was 8 to 10 weeks with os 1 finger dilated and products of conception felt in canal. Tenderness and fullness was present in fornices. Investigations revealed hemoglobin - 6 gm/dl, White blood cell count of 28,000/mm³ with 80% neutrophils, ESR was 150 mm at the end of 1 hour, blood urea-52 mg/dl, serum creatinine-1.7mg mg/dL. Further blood tests were within the normal range.

Ultrasonography showed septated collections in peritoneal cavity and anterior wall uterine perforation with retained products of conception were seen. Urgent exploratory laparotomy was done, which revealed multiple pus pockets within bowel

loops and pouch of douglas and a rent of about 5 cm in the anterolateral wall of uterus (Figure 1) along with wooden sticks in right broad ligament (Figure 2). Three samples of pus for culture were obtained from different sites and sent for microbiological analysis. Primary repair of uterine perforation was done. Saline lavage was done. Intra-abdominal drain was put in situ. Abdomen was closed in layers. She was admitted in intensive care unit (ICU) and was started on intravenous ampicillin, gentamicin and metronidazole. On second day she developed hypotension and hypoxia requiring inotropic support and mechanical ventilation. On the third hospital day vancomycin, was added, as on culture report all the three samples yielded *Staphylococcus aureus* which was resistant to penicillin, oxacillin, ciprofloxacin, gentamicin, erythromycin and sensitive only to vancomycin. The patient's clinical condition kept on deteriorating and on 10th day she had sudden cardiac arrest. In spite of the cardiopulmonary resuscitation the patient died.

Discussion

Obstetric patients comprise a unique population by virtue of the various anatomical, physiological and biochemical changes that occur in the gravid and puerperal states (Mabie and Sibai, 1990; Quah *et al.*, 2001; Lapinsky *et al.*, 1997; Afessa *et al.*, 2001). The occurrence of severe infection against a background of an altered cardio respiratory, immunological and metabolic function further complicates the clinical scenario. The infection in patients seeking abortion from untrained personnel can result from various sources like attempted abortion using infectious tools, lack of proper antiseptic and asepsis, incomplete evacuation, inadvertent injury to the genital organs and adjacent structures

(Dutta, 2004). Bacteria causing septic abortion include *E. coli*, group B hemolytic *Streptococci*, *Staphylococci*, *Klebsiella*, *bacteroides*, *Gonococci trachomatis*, *Clostridia hominis* and *influenzae*. Although properly timed surgery for evacuation of septic products and or pus is very important but effective antibiotics based on culture and sensitivity report is the essence of treatment. Antibiotic resistance in *Staphylococcus aureus* can be a particular challenge. More than 90% of clinical isolates are resistant to Penicillin. As many as 40% of nosocomial *Staphylococcus aureus* isolates

are now resistant to Methicillin (MRSA) and has become the most prevalent pathogen causing hospital infection throughout the world. In recent years the epidemiology of methicillin-resistant *S aureus* has changed and it has no longer remained a primarily hospital-acquired infection but is now a common community bacterial isolate, as found in our case where culture and sensitivity report of primary samples revealed MRSA. MRSA is associated with increased morbidity, mortality, length of hospital stay, and represents a major burden on healthcare service.

Figure.1 Figure showing rent in the anterolateral wall of uterus



Figure.2 Wooden sticks removed from the right broad ligament



The report of this case of septic abortion is also important at this point of time, when India is going through “A new kind of Abortion War” after introduction of a draft of The Medical Termination of Pregnancy (Amendment) Bill, 2014 by the Union ministry of health and family welfare. The proposed Act recommends on expanding the base of legal abortion to include medical practitioners with bachelors degree in unani, ayurveda or homeopathy and also nurses. The time limit has also been raised to 24 weeks from existing 20 weeks. Both these proposals are revolutionary and long awaited as there is nonavailability of qualified doctors in peripheral and rural areas of India and women find locally available medical practitioners and nurses easily accessible and affordable but the perception that MTP is too simple a procedure to warrant formal training is not supported by facts. The amendment will jeopardise the lives of women unless regular training courses for them under the supervision of expert obstetricians is not strictly recommended and implemented.

Sepsis remains a significant issue for obstetric patients. The outcome and survivability in patients with severe sepsis and septic shock are improved with early detection and prompt recognition of the source of infection, and targeted therapy with involvement of pharmacist, infectious disease specialists, critical care specialists and obstetricians. Complications of unsafe abortions are a major public health issue among women in developing countries. The consequences of unsafe abortions on women’s health and well being need to be acknowledged by everybody in the society and intensive dissemination of information and commitment at all levels is required.

References

- Afessa, B., Green, B., Delke, I., *et al.* 2001. Systemic inflammatory response syndrome, organ failure and outcome in critically ill obstetric patients treated in an ICU. *Chest*, 120: 1271–1277.
- Dutta, D.C. 2004. Text book of obstetrics, 6th edn. New central Book Agency (P) Ltd, Calcutta, India. Pp. 159–168.
- Lapinsky, S.E., Kruczynski, K., Seaward, G.R., *et al.* 1997. Critical care management of the obstetric patient. *Can. J. Anaesth.*, 44: 325–329.
- Mabie, W.C., Sibai, B.M. 1990. Treatment in an obstetric intensive care unit. *Am. J. Obstet. Gynecol.*, 162: 1–4.
- Quah, T.C., Chiu J.W., Tan, K.H. *et al.*, 2001. Obstetric admissions to the intensive therapy unit of a tertiary care institution. *Ann. Acad. Med. Singapore*, 30: 250–253.
- World Health Organization, 1994. Abortion: Geneva: World Health Organization. 2nd edn.