The Professional Medical Journal www.theprofesional.com

DOI: 10.29309/TPMJ/2020.27.05.3808

1. MSPT, BSPT Assistant Professor IMPR, Khyber Medical University, Peshawar.

- 2. Ph.D Scholar, MSPT,UK MS-OMPT, BSPT Associate Professor Riphah College of Rehabilitation and Allied Health Sciences, Riphah international University, Faisalabad.
- MBBS, Ph.D Professor St Lawrence College, St. Lawrence Drive, Cornwall, ON K6H 4Z1. Canada
 Ph.D (PT), MSPT, BSPT Professor
- IMPR, Khyber Medical University, Peshawar.

Correspondence Address:

Dr. Muhammad Kashif Associate Professor, RCRAHS, Riphah International University, Faisalabad, Pakistan kashif.shaffi@gmail.com

Article received on: 11/06/2019 Accepted for publication: 10/10/2019

INTRODUCTION

Gossypiboma is the name referred to the foreign body specially the cotton material, gauze pads left behind in the cavity during any surgical operation. This is an avoidable medical error or negligence and may cause serious morbidity and mortality.¹ Medical negligence include improper management of patient, wrong diagnoses, leaving surgical instrument, surgical packs in the abdomen, expired medication and administration of wrong injection.² Maternal mortality and morbidity due to medical errors remain unnoticed and undocumented due to lack of reporting system, whereas Pakistan is striving hard to achieve millennial developmental goals by considering multiple factors.

Many of gynecological especially perinatal medical negligence has been reported in the western countries which resulted a great deal of complications and even death to the patients and their new born. The claim was mostly related to the inappropriate technique during labor which was not consistent with the acceptable standard care.³ World Health Organization also reported

GOSSYPIBOMA: A CASE STUDY OF MEDICAL ERROR IN OBSTETRICIAN TERTIARY CARE HOSPITAL.

Ikram Ali¹, Muhammad Kashif², Muhammad Owais Aziz³, Haider Darain⁴

ABSTRACT: Pakistan is striving hard to achieve millennial developmental goals by considering multiple factors. However, maternal mortality and morbidity due to medical errors remain unnoticed and undocumented due to lack of reporting system. This case report is based on a multigravida, who presented with severe abdominal pain and tenderness. She was on multiple medications after five months of three consecutive surgeries including initial surgery for uterine rupture during labor. On examination, a mass was noticed in the umbilical region. A foreign body was suspected on ultrasound and diagnosed as gossypiboma after surgery. It is usually misdiagnosed and needs attention especially considering differential diagnosis in post-operative patients. Such errors might be avoided by properly counting number of gauze pieces before and after an intervention, and usage of radio opaque gauze pieces.

Key words: Gossypiboma, Morbidity and Mortality, Medical Negligence.

Article Citation: Ali I, Kashif M, Aziz MO, Darain H. Gossypiboma: A case study of medical error in obstetrician Tertiary Care Hospital. Professional Med J 2020; 27(5):1085-1088. DOI: 10.29309/TPMJ/2020.27.05.3808

a huge number of mortality in pregnant female during their perinatal care.⁴

It has been observed that majority of complication and death occur due to the systematic failure of treatment, failure of diagnoses, wrong surgical procedures which could have otherwise abated.⁵

Medical negligence related to gynecological problems is never been reported in Pakistan because of lack of awareness, lack of education, lack of proper of reporting system. Moreover the problem is considered private therefore it remain unnoticed. Nothing has been done to prevent such occurrence in Pakistan to minimize complication, morbidity and death.

In this report, we present a case of young 24 years old lady who had undergone a series of surgeries followed by medical error in various steps. The authors aim to report this article to avoid such incidence in future and shared contributing factors which if avoid may reduce complications, injuries and even death.



Case Report

A 24-years old female presented severe abdominal pain and mass in lower abdomen for 5 months. The patient was admitted to private hospital in April 2016. The patient was multipara with history of uterine rupture 5 months back after administration of misoprostol to induce the labor. The patient was operated in an emergency for uterine repair and then for removal of gauze pieces. The drains attached after surgery indicated continue bleeding due to which, exploratory laparotomy was performed to identify the bleeders. On follow-up, the patient complained of abdominal pain and objective examination by using abdominal ultra-sound was performed with findings of 'nothing inside'. The patient was counsel and prescribed pain killers, anxiolytic, antibiotics, proton pump inhibitors and multivitamin. After 5 months later in September 2016, the patient was taken to a general surgeon due to severe abdominal pain. On examination, the patient was vitally stable and a mass was noted in the hypogastric region. Exploratory laparotomy was performed and surgical gauze pieces were found dorsally adhered to the mesentery of colon. The gauze pieces were fully covered with the thick purulent collection (Figure-1). The gossypiboma was removed and drain was connected to the surgical site. Following drain removal resulted into no further pain and bleeding to the patient.



Figure-1. Figure showing gossypiboma with thick purulent collection around

DISCUSSION

Gossypiboma is retained surgical gauze or cotton piece in human body following a variety of surgeries.⁶ It is an avoidable medical error; however, provide strong ground to client for law suit. The consequences gossypiboma is clear from its damaging nature which often lead to delay recovery and even sometimes may be one of the significant comorbid factors risking lives of patient.7 Medical negligence can be defined as a medical error happens during patient management, when the healthcare provider aberrant from the standard procedure.⁵ Medical negligence encompass deviation from standard management protocol, leaving surgical instrument or surgical packs in the abdomen, administration of expired or wrong medication.8 In this case study, the patient encountered similar situation where medical negligence was observed in the form of leaving surgical guaze inside the body of the patients.

In Pakistan, medical errors are underreported due to unawareness among people about the potential medical negligence and errors, lack of education, nascence laws pertaining to malpractice and to some extent, cultural and religious constraints. Moreover, lack of positive response from the health authorities is considered one of the potential obstacles due to which victims of such negligence are reluctant to report the issue. Lack of highlighting such issues has remained one of the problems amongst health care professional in Pakistan and a dire need to educate health care professional about medical negligence and its consequences were strongly suggested.⁹

About 500,000 women die each year globally due to maternal mortality. The Maternal Mortality Ratio (MMR) is highest in Asian population in general and particular in India, Pakistan and Bangladesh.^{10,11} It has been a great challenge for the health care system to reduce maternal mortality. After the inception of Millennium Development Goal, maternal mortality ratio decline 5-7% in Pakistan but still Pakistan is among those countries where MMR is considered the highest.¹²

WHO reported multiple causes of maternal death

throughout the world¹³ but causes associated with perinatal medical error has never been reported. Through appropriate technique during ante and perinatal medical care can significantly reduce neonatal and maternal mortality and morbidity.³ Proper error reporting system and education of staff working in gynecology and obstetrics setups about medical negligence could reduce MMR. Whereas other common cause of MMR reported in Pakistan are pre partum and postpartum hemorrhage, followed by sepsis, eclampsia, infections, obstructed labour.^{13,14}

WHO designed a set of frame work called Integrated Management of Pregnancy and Child birth (IMPAC). The IMPAC offers a national policy, programs and action plans to manage mother and child birth. Further the WHO is working to train lady health visitors, midwives in community regarding some basic and skilled maternal and perinatal care to reduce potential complications to the mother and child.¹⁵ Implementation of these policies remained a challenge in developing countries including Pakistan.

One of the potential causes for various medical error and consequent complications is the poor health system in Pakistan. Huge work load specially in various tertiary care hospitals, dearth of relevant skilled health professionals and imbalance ratio of patients and health staff are some of the factors that might contribute to such errors. Government need to hire qualified skilled professional to meet the demand. In addition, there is dire need to change the attitude of health professional to focus quality rather than quantity.

Based on findings of this case and available literature on the topic, the following suggestion might help to mitigate the risk associated with the post-operative complications. Gossypiboma is a common medical error that happened throughout the world. In Pakistan, a few of them are reported. Proper surgical protocols need to be undertaken specially careful counting of packs before and after the operations, proper documentation of the materials used during the surgery may minimize the risk of gossypiboma and other foreign materials which may left in the abdomen.^{5,6,16,17} Moreover, it is very important to use radio opaque gauze pieces or packs instead of traditional packs. It will not only help early diagnoses but also prevent possible lethal complications and cost of treatment. In addition, clinical prediction rules while managing a patient help the health care professional to utilize the experience of expert professionals may help accurate diagnoses, treatment and appropriate prognoses.¹⁸ This might help to reduce morbidities and ultimately mortalities of patients.

In Pakistan, perinatal medical negligence is usually not reported due to lack of information regarding possible complications or probably due to cultural and religious aspects. The authors fail to see such perinatal claims or any indemnity provided to claimant in this aspect. The issue still exists and no positive improvements have been observed in any health care facility to minimize this potential problem.

Awareness is very important to address potential medical negligence in each department of tertiary care. It has been reported that in Pakistan the health care professional even surgeons know little regarding medical negligence and its various types and consequences.⁹

CONCLUSION

Gossypiboma is usually in terms of a potential medicolegal challenge, and from criticism both publicly and within the medical profession It is believed that other health professionals like physicians, doctors and allied health professional working in various clinical disciplines lack knowledge medical negligence regarding and appropriate awareness amongst these professionals seems indispensable to solving issues related to medical negligence. Moreover, taking proper measurement to avoid or at least minimize the occurrence of such error seems mandatory. This will not only reduce morbidity and mortality but also improve quality of life. Copyright© 10 Oct, 2019.

REFERENCES

- Margonis E, Vasdeki D, Diamantis A, Koukoulis G, Christodoulidis G, Tepetes K. Intestinal obstruction and ileocolic fistula due to intraluminal migration of a gossypiboma. Case reports in surgery. 2016; 2016.
- Boeschen C. Medical malpractice basics [cited 2016 11/21]. Available from: http://www.nolo.com/legalencyclopedia/medical-malpractice-basics-29855.html.
- Ogburn Jr PL, Julian T, Brooker D, Joseph M, Butler J, Williams P, et al. Perinatal medical negligence closed claims from the St. Paul Company, 1980-1982. The Journal of reproductive medicine. 1988; 33(7):608-11.
- Vogel J, Souza J, Mori R, Morisaki N, Lumbiganon P, Laopaiboon M, et al. Maternal complications and perinatal mortality: Findings of the world health organization multicountry survey on maternal and newborn health. BJOG: An International Journal of Obstetrics & Gynaecology. 2014; 121:76-88.
- Shiwani MH, Gadit AAM. Opinion and Debate-Medical negligence: A growing problem in Pakistan. JPMA-Journal of the Pakistan Medical Association. 2011; 61(6):610.
- Lata I, Kapoor D, Sahu S. Gossypiboma, a rare cause of acute abdomen: A case report and review of literature. International journal of critical illness and injury science. 2011; 1(2):157.
- Gagliardi N, Di Spinazzola NP, Di Mauro V, Ruggiero G, Muzj C. Intra-Abdominal foreign bodies: Gossypiboma and abdominal wall meshes. Imaging of Foreign Bodies: Springer; 2014. p. 37-46.
- 8. Morgan OM. **5 Common types of medical negligence claim.** 2016. english. Available at: https://www.ommlaw. co.uk/5-common-types-medical-negligence-claim/

- Sheikh A, Ali S, Ejaz S, Farooqi M, Ahmed SS, Jawaid I. Malpractice awareness among surgeons at a teaching hospital in Pakistan. Patient safety in surgery. 2012 Dec 1;6(1):26.
- Abou-Zahr CL, Royston E, World Health Organization. Maternal mortality: a global factbook. Geneva: World Health Organization; 1991.
- El Arifeen S, Hill K, Ahsan KZ, Jamil K, Nahar Q, Streatfield PK. Maternal mortality in Bangladesh: A Countdown to 2015 country case study. The Lancet. 2014; 384(9951):1366-74.
- 12. Jafarey S. Maternal mortality in Pakistan--compilation of available data. JPMA The Journal of the Pakistan Medical Association. 2002; 52(12):539-44.
- Khan KS, Wojdyla D, Say L, Gülmezoglu AM, Van Look PF. WHO analysis of causes of maternal death: A systematic review. The lancet. 2006; 367(9516):1066-74.
- Li X, Fortney J, Kotelchuck M, Glover L. The postpartum period: The key to maternal mortality. International Journal of Gynecology & Obstetrics. 1996; 54(1):1-10.
- 15. Maternal and perinatal health. 2016. WHO.
- 16. Makary MA, Daniel M. Medical error—the third leading cause of death in the US. BMJ. 2016; 353:i2139.
- Rajagopal A, Martin J. Gossypiboma—"A Surgeon's Legacy". Diseases of the colon & rectum. 2002; 45(1):119-20.
- Ebell MH. Evidence-based diagnosis: A handbook of clinical prediction rules: Springer Science & Business Media; 2001.

Sr. # Author(s) Full Name Contribution to the paper Author(s) Signature 1 Ikram Ali Conception of idea, Study desian. 2 Muhammad Kashif Data collection, Manuscript writing, COmpiling the resutls. 3 Muhammad Owais Aziz Introduction, Literature

review.

article.

AUTHORSHIP AND CONTRIBUTION DECLARATION

4

Haider Darain

Final proof reading of the