

Efficacy of B-Lynch for Uterine Atony - Experience in PESSI Hospital Lahore Pakistan

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ABSTRACT

Aim: To see the efficacy of B Lynch compression suture in uterine atony in primary post partum haemorrhage in PESSI hospital

Methods: This is descriptive study conducted in Gynae Department from January 2011 to January 2016. Total 55 cases of uterine Atony were applied B-Lynch suture during caesarean section with catgut no 2 and vicryl no 1.

Results: In 55 cases of uterine Atony with B-Lynch 22(94%) cases were treated successfully and PPH. These patients were saved from hysterectomy. Only 3 patients ended into obstetrical hysterectomy.

Conclusion: As in our study the success of B-Lynch was 94% and we can use this method as alternative to hysterectomy

Keywords: Uterine atony, B-lynch, post partum haemorrhage

INTRODUCTION

Primary Postpartum Hemorrhage (PPH) is defined as Excessive vaginal bleeding i.e. more than 500ml in normal delivery and more than 1000ml in Caesarean Section. If not managed promptly may lead to sever maternal morbidity and even mortality. This is the leading cause of maternal mortality in developing countries where one out of 1000 mother died because of complication of PPH¹.

Active management of 3rd stage of labour decreases the chances of PPH i.e., control cord traction, Injection of oxytocins or Synto-metrin at delivery of anterior Shoulder in primigravida and at crowning in Multigravida². Uterine atony is the major cause of PPH in both primigravida and multigravida³.

Uterine atony is treated by uterine massage, I/V bolus of oxytocin 10units, oxytocin infusion, PGE1 Per-rectum. If these measures are not compliant then surgical intervention like uterine artery ligation, internal iliac ligation and lastly hysterectomy are used as rescue maneuver previously but now compression suture i.e., B-Lynch is used as an alternative to hysterectomy.

PESSI is a tertiary care referral hospital. Our 75% patients are referred cases from all over the Punjab. Primary and repeat C. Section rate is very high. Most patients are anemic and came with complications, PPH either mild or sever can lead to serious consequences i.e., shock, renal failure and DIC etc. Our aim of this study is to see the efficacy of B -Lynch compression suture in uterine Atony

during CS and to promote this maneuver as a part of protocol of management of PPH due to uterine Atony in our setup.

METHODS & MATERIALS

This is descriptive study. This is conducted in PESSI hospital Multan Road, Lahore in Gynae Department from January 2011 to Jan 2016. 2850 caesarean section were done and out of these 55 cases of uterine Atony were applied B- Lynch suture. We used cat gun No. 2 and vicryl No. 2 for B- Lynch Suture. Specialized proforma used to record the information from all these patients, results were calculated in percentages. Patients with other causes of PPH i.e., retained placenta, genital tract trauma, morbidly adherent placenta were excluded from study.

RESULTS

Out of these 55 cases 52 cases were treated successfully 94%, compression achieved and PPH controlled. in 3 cases there was failure to achieve compression and ended into obstetrical hysterectomy 6%. Out of these 55 cases 12 (21.8) were primigravida 26 cases were multigravida 47.2% and grand multipara were 17(30.9%). 22 cases were booked (40%). 33 cases were unbooked (60%). Caesarean sections were done for different reasons 16(29.09%) CS was done for fetal distress 15(27.27%) CS were done for repeat CS. 8(14.54%) CS for placenta previa. 6(10.9%) CS was for over-distended uterus due to polyhydramnions, macrosomia and twin pregnancy. 4 CS were done for Prolong

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labour (7.27%). Chorioamnionitis was the indication in 3 (5.45%) cases.

Table 1: Sociodemographic relationship with parity

Primigravida	12	21.8%
Multigravida	26	47.2%
Grand multipara	17	30.9%

Table 2: Relationship with Booking

Booked	22	40%
Unbooked	33	60%

Table 3: Relationship with Indications

Indications	n	%age
Fetal distress	16	29.09
Repeat C/S	15	27.27
Placenta Previa	8	14.54
Over distended uterus	6	10.9
Prolong Labour	4	7.27
Chorioamnionitis	3	5.45

DISCUSSION

In our study 52(94%) cases were treated successfully with B Lynch suture, this success rate is high and comparable to the result of a case series conducted in Department of Obstetrics and Gynaecology in University of Toronto, Canada where success rate was 92%¹ and a study showed 93.75% reduction in hysterectomy due to compression suture⁷. In another study by Shazia et al. in Civil Hospital Karachi success rate was 83%⁴.

In our study 3(6%) cases ended into Obstetrical hysterectomy which shows its failure rate. This is comparable with a study conducted in India where 6.67% cases B. Lynch were found to be ineffective in controlling PPH⁵. Another study conducted in King Edward Medical College. The failure rate was only 2.22% which shows high efficacy of B-Lynch suture.

In our study failure cases were only 3(6%) one case was grandmultipara it was because of faulty technique and we were at initial stage of your study, which ultimately ended into obstetrical hysterectomy. One case was of placenta previa and we were unable to achieve compression, there was massive Hemorrhage and less availability of Rh-ve blood decision of Obstetrical hysterectomy was done in interest of mother's life. One case was of previous 3 LSCS, lower segment was thinned out and compression didn't achieve to control PPH

In our study 60% patients were booked and 40% were unbooked. In another study conducted at Karachi 80% of booked case were treated successfully⁴ in Karachi. In our study major number of patients were un booked because PESSI is a

tertiary care hospital receiving emergencies from all over the Punjab 24 hours.

Majority of cases were multigravida 26(47.2%). Primagravida 12(21.8%) and 17(30.9%) were grand multipara. Our results were not matching with the study conducted in India where majority cases were Primigravida 41.34%, and multigravida 36% and grandmultipara 20%⁵. The percentage of grand parity in our study was 30.9% because in our country we have large family sizes, less antenatal care facilities, delayed referrals and more prevalence of PPH.

Majority of CS done for fetal distress and repeat CS 29.09% & 27.27% respectively. Other indications include placenta previa 8(14.54%)

CONCLUSION

In view of our study the success rate of 94%, we would recommend that B-Lynch should apply in cases of PPH as alternate to hysterectomy, as this is effective method. It needs no extra cost on procedure, less expertise is required as compare to internal iliac artery ligation or uterine artery embolism. This technique can be employed as a protocol procedure in cases of PPH. Personals dealing and doing emergency CS should trained for this compression suture application. Regular audits should be done. Complication should be recorded and reported .How ever there is need for improvement in blood bank facilities. Obstetrical hysterectomy should be chosen as a last resort in case of failure of B-Lynch compression suture.

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