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Case Report

The Lost art of Tubal Ligation,Suture or Technique?

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ABSTRACT

Birth spacing is required to bring improvement in women's quality of life. Contraception and birth spacing by the permanent method of female sterilization i. ebilateral tubal ligation, holds an important place in this regard.

This case series deals with patients, reporting to Gynaecology Outpatient Department with surprise unexpected pregnancy /suspicion of pregnancy or secondary amenorrhea after permanent bilateral tubal ligation at time of last cesarean section. Basic objective was to identify the cause of failure of sterilization: Improper technique, wrong suture or wrong timing of procedure. Efforts were made to make proper technical recommendations for this procedure.

Key words: Contraception, Clips, Fallopian tubes, Tubal ligation.

How to Cite This Article: *Ashraf V, Sajjad R. The Lost art of Tubal Ligation,Suture or Technique?. Pak Armed Forces Med J 2024; 74(Suppl-2): S349-S351. DOI: https://doi.org/10.51253/pafmj.v74iSUPPL-2.9998*

INTRODUCTION

Permanent bilateral tubal ligation(BTL) is main gynecological objective and solution of today's world financial crisis situation. It is permanent and being offered to women at time of cesarean section ,in immediate postpartum period or later in form of Minilap, laparoscopy and recently by hysteroscopic.[1] All techniques used are based on mechanical disruption or blockade of fallopian tubes by cutting , ligating ,diathermy , Hulka clips or micro inserts in proximal sections of fallopian tubes.[2] Indication for tubal ligation include either completion of family or when future pregnancy deemed to be hazardous for women's health and life.[3]

Women included in this case series presenting with unplanned surprise pregnancy /suspicion of pregnancy, had undergone bilateral tubal ligation at time of their previous cesarean section with written informed consent regarding the irreversibility. Same was confirmed by their discharge summary or retrospective analysis of their old documents. Subsequent unwanted and unplanned pregnancies not only place the maternal life at increased risk of physical and psychological trauma,[4,5] was seen in our case series but also leads to trust deficit on medical facilities and potential for unpleasant litigations.[6,7] Failure rate ranges from 0.2-1.3%, with highest failure rate in tubal ligation done at caesarean section.[8] A series of nine patients presented with subsequent pregnancy after failed tubal ligation .Five patients continued regular follow up and were managed accordingly. Rest of patients were lost to follow up. Objective of our study reporting this case series of 5 patients, was to identify the cause of failure and to make proper technical recommendations.

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Received: 01 Mar 2023; revision received: 23 Jul 2024; accepted: 31 Jul 2024

Case-1

Mrs XYZ 36 year of age , para 3 with previous 3 cesarean with BTL 3 years ago, reported with secondary amenorrhea. Her associated symptoms of nausea and vomiting aroused the suspicion of pregnancy which was confirmed by urinepregnancy testand ultrasound. Despite patient and her husband being counselled and reassured as much as possible ,they remained belligerent throughout antenatal visits. As pregnancy progressed, it was complicated by gestational diabetes. Her elective cesarean section with bilateral tubal ligation by consultant gynecologist was planned on 30.11.21. At time of cesarean section ,examination revealed mild pelvic adhesions , with both tubes showing remnants of vicryl 1 , left partial and right tube was completely recanalized .This time, her bilateral tubal ligation was carried out with chromic catgut 1 using modified Pomeroy technique and tubal fragments were sent for histopathology .Patient was shifted to ICU for postop care.The patient was called for follow up and removal of stitch as per routine and H/P report. Histopathology confirmed remnants of fallopian tube.

After ethical committee review, written informed consent was taken from family for publication of this case.

Case-2

Mrs. XYZ 42 years of age ,previous three cesareans and bilateral tubal ligation 5 years back . Her EDDwas 30.6.2021,her cesarean was on 16 June. Bilateral tubal ligation was done with chromic catgut by using modified Pomeroy technique .

Figure-1: Operative Findings of Case 1 Showing Remnants of Sutures Used in Previous Ligation

Case-3

22 years of age ,previous three cesareans and bilateral tubal ligation in July 2020. She presented with amenorrhea of 5 months in gynae outpatient dept. Her EDDwas 17.7.2022. On disclosure of pregnancy , the couple was mentally disturbed . and continuation of pregnancy was difficult .They were counselled and antenatal care was continued. Her emergency cesarean was done on 8 July 2022 and per operatively, remnants of old sutures were seen. Bilateral tubal ligation was carried out with chromic catgut by using modified Pomeroy technique.

Figure-2: Showing Ultrasound of Index case 3 of Current Pregnancy

Case-4

A 28 years of age, previous 3 scars and bilateral tubal ligation 2 years back,presented in OPD after missing her periods in Nov 20. EDD was 19.7.21. She was admitted on 22.6.21 for elective cesarean and BTL was carried out by modified Pomeroy method. Tubal fragments were sent for histopathology .

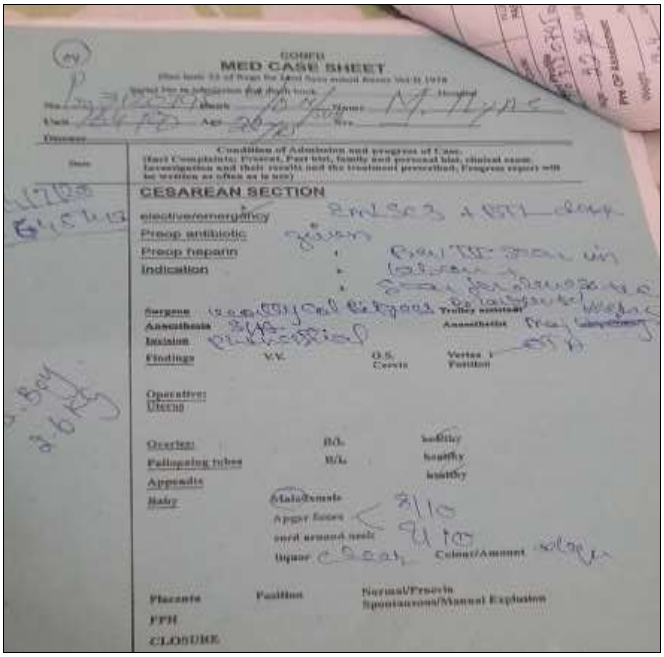

Figure-3: Showing Operative Notes of Index Case 3 with Evidence of BTL

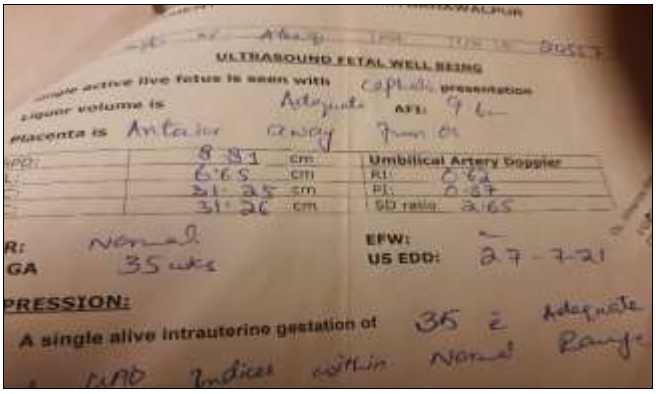

Figure-4: Showing Ultrasound Evidence of Current Pregnancy for Index Case 4

Case-5

previous 4 cesarean LCB 3 years with documented bilateral tubal ligation. She presented in gynae outpatient dept on 29.10.21 after missing her periods. The patient was angry and upset when she was informed about subsequent pregnancy. She was

counselled and refrained from litigations. Later the pregnancy ended up into blighted ovum for which she underwent MVA. Patient was recommended interval ligation but did not report back probably due to her mistrust.

DISCUSSION

Bilateral tubal ligation as a permanent method of contraception is being accepted by a reasonably large chunk of all females , especially when undergoing repeat cesarean deliveries or emergency cesarean section It was concluded by that 110000 women would desire for tubal ligation per year in United state.[9] It is done by employing Pomeroy or modified Pomeroy, where after closure of the uterine incision ,tubes are identified and picked with bibcock ,crushed and ligated.[2] Later the tube ends fall apart so that passage of fertilized ovum is not allowed and implantation does not happen. While informed consent is being obtained ,it is clearly explained that it is permanent method and failure chance is remote (1:200).[8]

In year 2019, total cesarean section done at CMH BWP were 1230, among those 30 patients had bilateral tubal ligation and 9 out of them presented with failure in form of subsequent pregnancy so the failure rate was 30% which was very high when compared with worldwide documented failure rate that is 0.5%. 8 Women age , her parity , decision of husband and family has important role in making decision for permanent tubal ligation.[10] Most of tubal ligations are done at time of cesarean sections so detailed counselling of patient and family is mandatory.[10]

Conflict of Interest: None.

Authors' Contribution

Following authors have made substantial contributions to the manuscript as under:

VA & RS: Data acquisition, data analysis, critical review, approval of the final version to be published.

Authors agree to be accountable for all aspects of the work in ensuring that questions related to the accuracy or integrity of any part of the work are appropriately investigated and resolved.

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