

PROSPECTIVE STUDY OF THE SINGLE PUNCTURE LAPAROSCOPIC TUBAL LIGATION

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ABSTRACT

Objective: to evaluate the demographic data like, age, parity, living male, educational status, intra op. & post op. complications of the laparoscopic tubal ligation by single puncture method.

Methods: A prospective study of Lap. TL done at medical college Baroda during 2008-2009. Total 1160 cases were enrolled as per criteria & lap TL done under sedation plus local anaesthesia, also done after 1st trimester MTP, interval & Puerperial period.

Result: Most of the patients 79.57% were of the 21-30 yrs. 51.98% were 2nd para while 33.97% were 3rd Para. & only 1.55% were Primipara. 98.44% women had a 2 or more living children & only 1.56% had only one living child. 97.24% had 1 or more male child & only 2.76% had no male child. 36.38% were uneducated while 45.43% were educated upto high school level. & only 3.01% only were graduated. 8(0.69%) pt had perforation of uterus while 5(0.004%) had tubal transaction, 4(0.003%) had mesosalpinx hematoma & 1(0.0008%) required laparotomy. 36(0.03%) had a post operative pain which usually cured with analgesics. 11(0.0095%) had serous & blood discharge from wound, 4(0.003%) had wound gaping, 1 (0.0008%) had omental prolapsed. none had a peritonitis or bowel injury or laparotomy at later stage. It requires further study & follow up to comment on the failure rates.

Keywords: Laproscopic Tubal Ligation, prospective study, hematoma

INTRODUCTION

Female sterilization is the permanent surgical method of the contraception, or women's incapability to get pregnant after operation. Normally egg & sperm meet in fallopian tube, here we ligate cut or coagulate the fallopian tube by various methods. National Family Planning Programme started in India since 1956, sterilization was done by open tubectomy method.

Laparoscopic tubal ligation was performed in India by early 1960-1970s then became popular. In India population explosion is one of the major health problems. Breast feeding is one of the commonest used contraceptive methods then female sterilization, which is most widely accepted by couples, society & surgeons because Lap TL falls in very close category of ideal & safe sterilization method.

MATERIAL & METHODS

Prospective observational study in women desiring Lap TL were enrolled in study. All pre-operative examination & investigations were done. All patients live childrens were primary screened by Paediatrician for any major illnesses/diseases & counseled. Then

consent were taken & total of 1160 patients were operated under sedation with local Anesthesia. Laparoscopic sterilization was done with single puncture Laparacator & fallopes ring. All patients were observed for post op 4-6 hours, then given oral antibiotics, analgesics & discharged with advice, for any abnormal sign, other wise routine follow up at 7th day, after period or if misses a period.

OBSERVATIONS

Table -1: Age group wise distribution of the patients

Age of patient	No of patients (n=1160) (%)
< 20 yrs	16 (1.38)
21-25yrs	409 (35.26)
26-30 yrs	514 (44.31)
31-35 yrs	166 (14.31)
>35 yrs	55 (4.74)

Table -1 & 2 shows Most of the patients 79.57% were of the 21-30 yrs. 51.98% were 2nd para while 33.97% were 3rd Para. & only 1.55% were Primipara.

Table- 2: Parity & educational status of the patients

Parity	Uneducated	Upto 5 th	6-12 th	Graduate	Total (%)
1	02	06	08	02	18 (1.55)
2	268	68	239	29	603 (51.98)
3	108	55	227	04	394 (33.9)
4	27	32	28	00	87 (7.5)
5& more	17	15	25	01	58 (5)
Total (%)	422 (36.38)	176 (15.18)	527 (45.43)	35 (3.01)	

Table -3: No of living children & living male child

No of living child	Subject (n=1160) (%)	No of living male child	subject (n=1160) (%)
1	18 (1.56)	1	32 (2.76)
2	606 (52.24)	2	586 (50.52)
3	398 (34.31)	3	478 (41.21)
4	90 (7.75)	4	55 (4.73)
5& more	48 (4.14)	5& more	09 (0.78)

Table-3 shows 98.44% women had a 2 or more living children & only 1.56% had only one living child. 97.24% had 1 or more male child & only 2.76% had no male child. 36.38% were uneducated while 45.43% were educated upto high school level. & only 3.01% only were graduated.

Table- 4: Intra operative complications

Complications	Patients (%) (n=1160)
Extra peritoneal air insufflations	21 (1.81)
Perforations of uterus	08 (0.69)
Tubal transections	05 (0.004)
Mesosalpinx hematoma	04 (0.003)
Laparotomy	01 (0.0008)

Table 4 describes that 8(0.69%) pt had perforation of uterus while 5(0.004%) had tubal transaction, 4(0.003%) had mesosalpinx hematoma & 1(0.0008%) required laparotomy.

Table- 5: Post operative complications

Complications	Patients (%) (n=1160)
Serous/oozing from wound	11 (0.0095)
Wound gaping	04 (0.003)
Omental prolapsed	01 (0.0008)
Post operative pain	36 (0.03)
Peritonitis	00 (00)
Failure (no long follow up)	

Post operative complications were mentioned in table 5. 36(0.03%) had a post operative pain which usually cured with analgesics. 11(0.0095%) had serous & blood

discharge from wound, 4(0.003%) had wound gaping, 1 (0.0008%) had omental prolapsed. none had a peritonitis or bowel injury or laparotomy at later stage. It requires further study & follow up to comment on the failure rates. Time duration for operative procedure was mention in table 6.

Table -6: Time of the operation

	Subject (%) (n=1160)
Interval Lap TL	516(44.48)
Pueperal lap TL (after 5 wks)	48(4.14)
After 1 st trimester MTP	596(51.38)

DISCUSSION

In our study most of the patients 79.57% were of the 21-30 yrs. With average 26 yrs & More than 85% were 3rd Para, which corresponds with Rajendrasingh et al, where average age is 28yr. parity 03. Mean stay of the patients in hospital was 4-6 hours except one laparotomy, No mortality & almost all patients are without any major complications. . only very few patients had Post op Nausea, only 36(0.03%) had postoperative pain, which is usually treated with oral analgesics. Still in our set up people had a affinity for male child, so 97.24% had 1 or more male child & only 2.76% had no male child. That requires awareness and educations of the patients. 36.38% were uneducated while 45.43% were educated upto high school level. & only 3.01% only were graduated. 8(0.69%) pt had perforation of uterus which was with uterine manipulator and no active intervention required. while 5(0.004%) had tubal transaction, which was taken care by applying fallops ring on both ends of the tube. 4(0.003%) had mesosalpinx hematoma, which was also taken care by applying extra riing over mesosalpinx & only 1(0.0008%) required laparotomy as due to active bleeding which was done by a trainee as our institute is a training institute, so we can say LapTL is safer in the trained & experienced surgeons. 11(0.0095%) had serous & blood discharge from wound, 4(0.003%) had wound gaping, 1 (0.0008%) had omental prolapsed, which was repositied & resuturing done in that case, all other were done dressing only. none had a peritonitis or bowel injury or laparotomy at later stage. It requires further study & follow up to comment on the failure rates. & any long term sequel, It has a failure rate of (0.1-0.5) 3-4/1000 operations. Common causes are

misapplications over round ligament, broad ligament, small loop, poor quality of rings, & very rarely natural recanalization.

In our study 5 (0.004%) patients had tubal transection occurred due to tubal oedema congested tubes one was of puerperial group which usually corresponds with the Asalkar Mahesh R et al,

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