West Middlesex University Hospital

Date of Search: 10 August 2017
Sources: Medline, Embase.

Tubal Ligation

See full search strategy

1. Gross and histologic examination of tubal ligation failures in a residency training program

Author(s): Stovall T.G.; Ling F.W.; O'Kelley K.R.; Coleman S.A.

Source: Obstetrics and Gynecology; 1990; vol. 76 (no. 3); p. 461-465

Publication Date: 1990

Publication Type(s): Article

PubMedID: 2381624

Abstract:A previous study from this institution revealed laparoscopic tubal sterilization failure rates of 26.5 per 1000 and 45.5 per 1000, respectively, for the tubal ring and spring-loaded clip in procedures performed by residents in training. In an effort to identify potential anatomical reasons for this unacceptably high failure rate, 20 patients becoming pregnant after laparoscopic tubal occlusion underwent bilateral salpingectomy. Gross and histologic evaluation of the surgical specimens demonstrated improper application of the occlusive device in all cases. Seventeen patients were found to have nonoccluded or partially occluded tubes on one or both sides, with all occlusive devices located in the infundibular segment. Two patients were missing tubal rings on one side, and the remaining patient had a tubal ring misapplied to the round ligament. Sixteen residents who had completed a 1-month rotation on the ambulatory surgery service were given a standardized interview to assess their knowledge of proper sterilization techniques as well as their training experience. The frequency of incorrect responses given to four specific questions concerning proper placement of the tubal ring and spring-loaded clip ranged from 43.8-81.2%. The sterilization failure rate at this institution appears to be directly related to the resident surgeon's lack of understanding of the operative technique. Realizing that our institution is not unlike most other resident training programs, we developed a standardized education program including formal instruction of residents in proper sterilization technique and have altered supervisory guidelines for attending surgeons.

Database: EMBASE

2. Female sterilization failure: Review over a decade and its clinicopathological correlation.

Author(s): Date, Shilpa Vishwas; Rokade, Jyoti; Mule, Vidya; Dandapannavar, Shreedher

Source: International journal of applied & basic medical research; Jul 2014; vol. 4 (no. 2); p. 81-85

Publication Date: Jul 2014

Publication Type(s): Journal Article

PubMedID: 25143881

Available in full text at International Journal of Applied and Basic Medical Research - from National Library of Medicine

Abstract:OBJECTIVES The primary objective of the following study is to determine the demographic patterns of women presenting as sterilization-failure and secondary is to evaluate possible etiological factors for failure and lay standard guidelines to reduce failure rate.MATERIALS AND METHODSThe present study is retrospective study conducted in Department of Obstetrics and Gynecology, Government Medical College and Hospital-based on the case records maintained in our institution over a decade (April 2002-March 2012).RESULTSOver a decade, 140 cases of sterilization-failure with longest interval of 20 years have been documented out of 80 (57.14%) cases were of minilaparotomy (minilap), 53 (37.86%) laparoscopic tubal ligation and 5 (3.57%) were lower segment cesarean section. In 84 cases (60%) sterilization were performed in Primary Health Centre (PHC). Only 58 (41.43%) patients reported failure in 1(st) trimester (<12 weeks). 14 cases (10%) were of ectopic pregnancy. There were 25 cases (17.86%) of spontaneous recanalization. In 27 cases (19.29%) failure was due to improper surgical procedure and rest 54 (38.57%) have conceived due to tuboperitoneal fistula.CONCLUSIONFemale sterilization even though considered as permanent method of contraception, recanalization is possible even 20 years after procedure. Maximum cases of failure were with minilap and those were performed at PHC. The most common cause of failure was tuboperitoneal fistula. Ectopic pregnancies were seen in 10% of cases. Proper counseling of patient is must. There is a need to stick to standards of sterilization procedure to prevent future failure.

Database: Medline

3. Laparoscopic tubal sterilization: Long-term failure states

Author(s): Branquinho M.; Carnide C.; Marques I.; Almeida J.; Leitao Marques A.; Santos Silva I.; Geraldes F.

Source: Gynecological Surgery; 2009; vol. 6

Publication Date: 2009

Publication Type(s): Conference Abstract

Available in full text at Gynecological Surgery - from ProQuest

Available in full text at Gynecological Surgery - from Springer Link Journals

Abstract: Objective: To evaluate the failure of laparoscopic tubal sterilization (TS) and the rate of tubal ligation syndrome. Methods: A retrospective transversal analysis of medical files of 392 women who underwent laparoscopic tubal sterization in our Institution between 2000 and 2006. This clinical study included patients who had a minimum of 30 months of postoperative follow-up. The variables studied were: age, weight, parity, indication, comorbidities, previous surgeries, contraceptive methods before surgery, type of laparoscopic sterilization, complications, days of hospitalization and the rates of post tubal ligation syndrome and pregnancy. Results: Ninety women had more than 2 children. TS was performed for medical indication in 48 cases (12,1%) being hypertension the most common (23,4%). Bipolar coagulation was used in 43 cases (10,9%) and silastic bands in 314 cases (80,1%). The laparoconvertion rate was 1%. Pos-tubal ligation syndrome

occoured in 15 cases (out of 206 women we could contact by telephone) and 3 failures of laparoscopic tubal sterilization were identified (0,7%). Most women present regular cycles after surgery. Conclusions: The long-term sterilization failure rate for laparoscopic tubal sterilization is comparable to the results of others studies. These findings can be used to properly counsel women about the risks of sterilization failure and post tubal ligation menstrual disorders with this procedure.

Database: EMBASE

4. Failed sterilisation: evidence-based review and medico-legal ramifications.

Author(s): Varma, Rajesh; Gupta, Janesh K

Source: BJOG : an international journal of obstetrics and gynaecology; Dec 2004; vol. 111 (no. 12); p. 1322-1332

Publication Date: Dec 2004

Publication Type(s): Journal Article Review

PubMedID: 15663114

Available in full text at BJOG: An International Journal of Obstetrics and Gynaecology - from John Wiley and Sons

Database: Medline

6. The risk of pregnancy after tubal sterilization: findings from the U.S. Collaborative Review of Sterilization.

Author(s): Peterson, H B; Xia, Z; Hughes, J M; Wilcox, L S; Tylor, L R; Trussell, J

Source: American journal of obstetrics and gynecology; Apr 1996; vol. 174 (no. 4); p. 1161

Publication Date: Apr 1996

Publication Type(s): Journal Article

PubMedID: 8623843

Abstract:OBJECTIVEOur purpose was to determine the risk of pregnancy after tubal sterilization for common methods of tubal occlusion.STUDY DESIGNA multicenter, prospective cohort study was conducted in U.S. medical centers. A total of 10,685 women who underwent tubal sterilization was followed up for 8 to 14 years. The risk of pregnancy was assessed by cumulative life-table probabilities and proportional hazards models.RESULTSA total of 143 sterilization failures was identified. Cumulative 10-year probabilities of pregnancy were highest after clip sterilization (36.5/1000 procedures) and lowest after unipolar coagulation (7.5/1000) and postpartum partial salpingectomy (7.5/1000). The cumulative risk of pregnancy was highest among women sterilized at a young age with bipolar coagulation (54.3/1000) and clip application (52.1/1000).CONCLUSIONS Although tubal sterilization is highly effective, the risk of sterilization failure is higher than generally reported. The risk persists for years after the procedure and varies by method of tubal occlusion and age.

Database: Medline

7. Ectopic pregnancy subsequent to sterilization: Histologic evaluation and clinical implications

Author(s): Stock R.J.; Nelson K.J.

Source: Fertility and Sterility; 1984; vol. 42 (no. 2); p. 211-215

Publication Date: 1984

Publication Type(s): Article

PubMedID: 6745455

Abstract: Ten ectopic pregnancies subsequent to tubal sterilization were histologically evaluated. In seven of the ten cases, the sites for the ectopic implantation appeared to be related to the presence of a distal remaining tubal segment that had a tuboperitoneal fistula on the medial side. As against a currently held opinion that the ectopic implantation occurs secondary to a relative disparity in the size of the sperm, the fertilized ovum, and the proximal tuboperitoneal fistula, we believe that the implantations are influenced by probable fluid movements within the remaining tubal segments. The need to consider conservative surgical approaches and good intraoperative notations in patients with an ectopic pregnancy subsequent to sterilization is stressed.

Database: EMBASE

8. Tubal patency following 'Uchida' tubal ligation

Author(s): Stock R.J.

Source: Obstetrics and Gynecology; 1980; vol. 56 (no. 4); p. 521-525

Publication Date: 1980

Publication Type(s): Article

PubMedID: 7422201

Abstract: Three cases of tubal patency following Uchida-type tubal ligation were identified. A histopathologic study of the excised segments in question revealed incomplete transection of the tube. Modification of the Uchida procedure by attempting to remove a small segment of tube led to simple unroofing of the fallopian tube. This procedural defect was suspected by the presence of incomplete lumens in the tubal segments initially submitted to pathology. The author stresses the importance of proper exchange of information between the surgeon and pathologist to avoid tubal ligation failures that could be identified and otherwise prevented.

Database: EMBASE

Strategy 254858

#	Database	Search term	Results
1	Medline	("Bilateral Tubal Ligation*").ti,ab	125
2	Medline	exp "TREATMENT FAILURE"/	30662
3	Medline	(1 AND 2)	1
4	Medline	(cesarean* OR caesarean* OR "c section*").ti,ab	51118
5	Medline	exp "CESAREAN SECTION"/	39768
6	Medline	(4 OR 5)	63289
7	Medline	(1 AND 6)	26
8	Medline	(fail*).ti,ab	910784
9	Medline	(1 AND 8)	10
10	EMBASE	exp "UTERINE TUBE LIGATION"/	2719
11	EMBASE	(histolog*).ti,ab	664108
12	EMBASE	(10 AND 11)	123
13	EMBASE	exp "CESAREAN SECTION"/	80848
14	EMBASE	(12 AND 13)	12
15	EMBASE	(10 AND 13)	352
16	EMBASE	exp "TREATMENT FAILURE"/	113491
17	EMBASE	(15 AND 16)	11
18	EMBASE	(confirm*).ti,ab	1372512
19	EMBASE	(10 AND 18)	180

20	EMBASE	exp "FALSE POSITIVE RESULT"/	21072
21	EMBASE	(10 AND 20)	2
22	EMBASE	exp "FALSE NEGATIVE RESULT"/	13316
23	EMBASE	(10 AND 22)	0
24	EMBASE	(histolog*).ti	65509
25	EMBASE	(10 AND 24)	22
26	EMBASE	("tubal ligation").ti,ab	2193
27	EMBASE	(16 AND 26)	38
28	EMBASE	(histolog*).ti,ab	664108
29	EMBASE	(26 AND 28)	125
30	EMBASE	(fail* OR incomplete).ti,ab	1352654
31	EMBASE	(26 AND 30)	219
32	Medline	("tubal ligation").ti,ab	1552
33	Medline	(histopatholog*).ti	27731
34	Medline	(32 AND 33)	3
35	Medline	exp "STERILIZATION, TUBAL"/	4133
36	Medline	(33 AND 35)	4
37	Medline	exp "FALLOPIAN TUBES"/pp	229
38	Medline	(35 AND 37)	6
39	Medline	(histolog* OR histopath*).ti,ab	468554
40	Medline	(32 AND 39)	74

41	Medline	(tubal ADJ2 histolog*).ti,ab	50
42	EMBASE	(tubal ADJ2 histolog*).ti,ab	49
43	EMBASE	(10 AND 42)	4
44	Medline	(patholog*).ti,ab	637945
45	Medline	(32 AND 44)	66
46	EMBASE	(10 AND 16)	48
47	EMBASE	exp REOPERATION/	67225
48	EMBASE	(10 AND 47)	15
49	EMBASE	(incomplete* ADJ2 transect*).ti,ab	55
50	EMBASE	(10 AND 49)	1
51	EMBASE	(transection*).ti,ab	21777
52	EMBASE	(10 AND 51)	5
53	EMBASE	(incomplete*).ti,ab	146279
54	EMBASE	(10 AND 53)	17
55	EMBASE	(patency).ti,ab	43573
56	EMBASE	(10 AND 55)	25
57	EMBASE	(transect*).ti,ab	32448
58	EMBASE	(10 AND 57)	10
59	Medline	(transect*).ti,ab	26406
60	Medline	("tubal ligation").ti,ab	1552
61	Medline	(59 AND 60)	5
62	Medline	exp "PATHOLOGY,	1720

		SURGICAL"/	
63	Medline	(60 AND 62)	0
64	EMBASE	exp HISTOPATHOLOGY/	460434
65	EMBASE	(10 AND 64)	108
66	EMBASE	exp "PREDICTIVE VALUE OF TESTS"/	117565
67	EMBASE	(10 AND 66)	9
69	Medline	("tubal sterili?ation").ti,ab	1136
70	Medline	(59 AND 69)	4
71	Medline	(2 AND 69)	22
73	Medline	(pregn*).ti	191544
74	Medline	(69 AND 73)	94
75	Medline	(fail* ADJ2 "tubal ligation").ti	7
76	Medline	exp "FALLOPIAN TUBES"/pa	1612
77	Medline	(35 AND 76)	102
78	Medline	(audit*).ti,ab	124776
79	Medline	(69 AND 78)	0
80	Medline	(35 AND 78)	8
81	EMBASE	(audit*).ti,ab	170877
82	EMBASE	(10 AND 81)	8
83	EMBASE	(specimen*).ti,ab	411231
84	EMBASE	(10 AND 83)	49