NATIONAL HOSPITAL OF OBSTETRICS AND GYNECOLOGY

FACTORS AFFECTING OUT COME OF RECONSTRUCTIVE SURGERY FOR FALLOPIAN TUBES AMONG PATIENTS WITH TUBAL STERILIZATION

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Introduction

- According to WHO, 40% of women are infertile, in which about 40-60% of infertile women as a result of tubal patency, about 1,5-15% of infertile women as a result of tubal sterilization, in Vietnam the prevalence was estimated approximately 2,9%.
- Reconstructive surgery for fallopian tubes (RSFFT) was first used in the fist half of 20th century by open surgery, laparoscopic surgery.
- Prevalence of women have being pregnant after RSFFT according to Swolin (1967) was reported 23,9%, Gomel (1977) reported 68%, Charles Koh and Grace Janik (1993) reported 30% after RSFFT 3 months, 50% after RSFT 6 months, 77% after RSFFT 1 year after and Alani Audebert (1986 2002) reported the prevalence around 31-83%.



Introduction

- □ In Viet Nam, Nguyen Duc Vy (2005) reported 50%-70% of women have being pregnant after RSFFT, according to Nguyen Ba My Nhi (2005-2008) the prevalence were 48,6%. Dinh Bich Thuy (2009) reported that 41% women have being pregnant after RSFFT.
- Results of RSFFT depend on characteristics of patients. Thereby, to assess factors affecting outcome of reconstructive surgery for fallopian tubes among women patients with tubal sterilization, we conducted the study.



Methods

- Participants: women patients with tubal sterilization, after reconstructive surgery for fallopian tubes in National Hospital of Obstetrics and Gynecology from 2010 to 2014.
- Research design: the study was used descriptive cross-sectional and quantitative method.







Methods

Calculation of simple size:

$$n = \frac{Z_{(1-\alpha/2)}^2 p (1-p)}{d^2}$$

- In which:
- $\overline{Z}_{(1-\alpha/2)}$: This depends on level of significance, for 5% this is 1.96
- P: % frequency of women with with tubal sterilization in the population, according to previous study was reported 2,9%.
- d Absolute precision required at level d = 0.03
- n: simple size for the study, with above values, we need at least 121 patient for the study. Addition 30% patient to the simple size preventing in case some patients withdrawing, we listed 157 patients. Finally, 154 patients participated to the study.





The age		t being egnant] pr	Total			
of patients	No.	%	No.	0/0	Total		
<u>≥</u> 35	41	52,56	37	47,44	78		
< 35	26	34,21	50	65,79	76		
Total	67	43,51	87	56,49	154		
χ 2=5,28, p < 0,05, OR=2,13 (95%CI 1,11-4,08)							

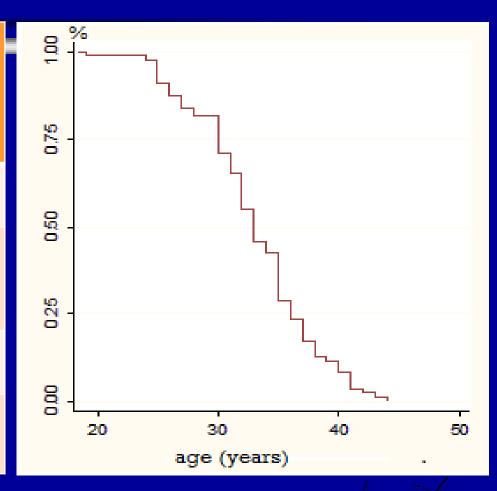


Table 1. The age of patient affecting outcome of RSFFT

Figure 1: Prevalence of women have being prenant in selected age-group

- Similarly to Dinh Bich Thuy 2009), Nguyen Duc Vy (2005), the age of < 35 year old, 50 62,5%, of women have being pregnant after RSFFT
- ▶ Compared with Hanafi ,the age of < 35 year old < , 85,7% of women have being pregnant after RSFFT





Regions		being gnant	Being p	regnant	Total	Occupations		t being egnant		eing egnant	Total
J	No.	%	No.	%			No.	%	No.	%	
Rural	48	43,24	63	56,76	111	Peasant	39	41,49	55	58,51	94
Urban	19	44,19	24	55,81	43	Others	28	46,67	32	53,33	60
Total	67	43,51	87	56,49	154	Total	67	43,51	87	56,49	154
χ2=0,011, p=0,916, OR=0,96 (95%CI 0,47-1,96)					χ2=0,3394, p=0,527, OR=0,81 (95%CI 0,42-1,56)					2-1,56)	

Table 2: Living regions for patients affecting outcome of RSFFT

Table 3: Occupations of patients affecting outcome of RSFFT





Time after	Not being pregnant		B pre	Total	
the surgery	No.	0/0	No.	%	Total
≥5 Years	59	48,76	62	51,24	121
<5 Years	8	24,24	25	75,76	33
Total	67	43,51	87	56,49	154

χ2=6,34, p=0,012, OR=2,97 (95%CI 1,24-7,11)

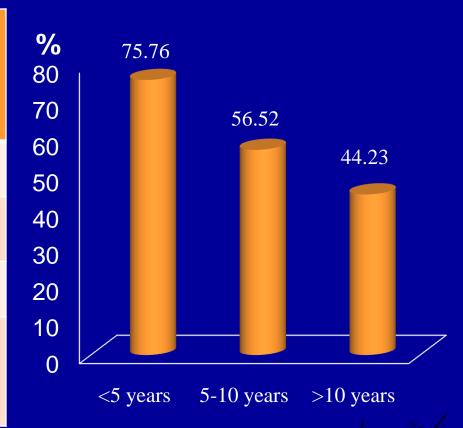


Table 4: Time from tubal sterilization to the surgery affecting outcome of RSFFT

Figure 2: Prevalence of women have being prenant in group by time from tubal sterilization to the surgery

• Comparing with Dinh Bich Thuy time from sterilization under 5 years, 61,9% of women have being pregnant



Prehistoricall y infected		being gnant	Be preg	. Total			
with Chlamydia	No.	%	No.	%	Total		
Yes	17	77,27	5	22,73	22		
No	50	37,88	82	62,12	132		
Total	67	43,51	87	56,49	154		
χ2=11,91, p=0,001, OR=5,58 (95%CI 1,94-16,05)							

Metho d of		t being egnant	Being	Total			
steriliz ation	No.	0/0	No.	%	10001		
Hulka clip	37	45,68	44	54,32	81		
Pomeroy	30	41,10	43	58,90	73		
Total	67	43,51	87	56,49	154		
χ2=0,328, p=0,567, OR=1,21 (95%CI 0,64-2,28)							

Table 5.: Prehistorically infected with Chlamydia affecting outcome of RSFFT

Table 6.: Method of sterilization affecting outcome of RSFFT

- According to Dinh Bich Thuy (2005), with sterilized by pomeroy 37,5% of women have being pregnant after RSFFT, and with Hulka clip 56,3% of women have being pregnant. After RSFFT.
- Audebert A (2002), reported that women have being pregnant. After RSFFT. in group with sterilized by pomeroy was reported 50%, by Hulka chip was reported 82%, by electrocautery was reported 45,5%





Being sticky fallopian		ot being egnant	Being pregnant		Total
tubes before RSFFT	No.	%	No.	%	
Yes	33	66,00	17	34,00	50
No	34	32,69	70	67,31	104
Total	67	43,51	87	56,49	154
χ2=15,24, p<	<0,001	, OR=4,00	95%	6CI 1,96-8	,16)

Table 7: Being sticky fallopian tubes affecting outcome of RSFFT

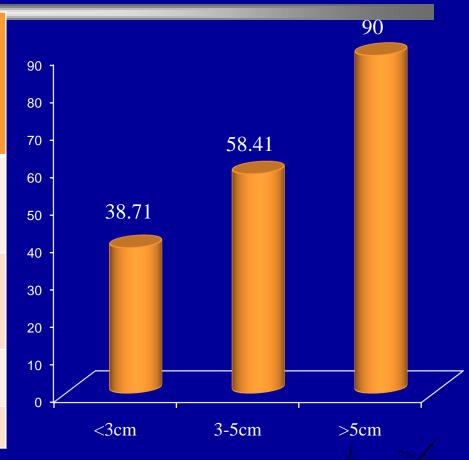


Figure 3: Prevalence of women have being pregnant in group of length of fallopian tube





Length of fallopian	Not being pregnant		F pre	Total			
tube	No.	%	No.	%			
< 3cm	19	61,29	12	38,71	31		
≥3cm	48	39,02	75	60,08	123		
Total	67 43,51		87	56,49	154		
χ2=4,99, p=0,025, OR=2,47 (95%CI 1,10-5,55)							

Connected position	Not being pregnant		Being pregnant		Total		
p 0.0232222	No.	%	No.	%			
ampullary- ampullary, isthmic- ampullary, or interstitial- isthmic	25	59,52	17	40,48	42		
Isthmic- isthmic	42	37,50	70	62,50	112		
Total	67	43,51	87	56,49	154		
χ2=6,03, p=0,014, OR=2,45 (95%CI 1,19-5,06)							

Table 8: Length of fallopian tubes affecting outcome of RSFFT

Table 8: Connected position in fallopian tubes affecting outcome of RSFFT

- connected fallopian tubes between isthmic-isthmic reported by Nguyen Duc Vy(2005) was 73,3% Dinh Bich Thuy (2009) was 75%,
- According to Dubuisson JB (1997)- Paul D (1998) the prevalence was reported around 75%, 89%,.

Conclusion



- Outcome of RSFFT was affected significantly by factors including the age of patients, time from being sterilized to the surgery, prehistorically infected with Chlamydia, being sticky fallopian tubes, length of fallopian tube before surgery, connected position in fallopian tubes (p<0,05). In detail as follows:
- Risk of not being pregnant among women \ge 35 years of age is 2,13 time higher than women <35 years of age.
- Risk of not being pregnant among women with time from tubal sterilization to the surgery ≥ 5 years is 2,97 time higher than women with time from tubal sterilization to the surgery < 5 years.
- Risk of not being pregnant among women prehistorically infected with Chlamydia is 5,58 time higher than women were did not.
- Risk of not being pregnant among women were sticky fallopian tubes is 4 time higher than women were not.
- Risk of not being pregnant among women had length of fallopian tubes <3 cm is 2,47 time higher than women had length of fallopian tubes ≥ 3 .
- Risk of not being pregnant among women were connected fallopian tubes between ampullary-ampullary, isthmic-ampullary, or interstitial-isthmic is 2,45 time higher than connected fallopian tubes between isthmic-isthmic.



Thanks for your attention!

