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THE RELATIONSHIP BETWEEN AGE AND PARITY WITH MYOMA UTERI IN DR. H. SOEWONDO HOSPITAL KENDAL

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ABSTRACT

Background: *Myoma uteri is one of benign gynecological tumors are the most common, found one in four women of reproductive age. The incidence of uterine myoma approximately 20-30% of all women. Myoma uteri was not found in children who have not menstruating, in women aged 35-45 years was found about 25% and in menopausal women is only about 10%. Just a little possibility of developing uterine myomas in women often give birth than those who were never pregnant or just had a single pregnancy.*
Aims: *The purpose of this study was to determine the relationship between age and parity of women with myoma uteri.*
Methods: *This research is analytic survey with case control method. The study was conducted at Dr. H. Soewondo Hospitals in Kendal Regency in July 2011. The population of this study were all patients with gynecological diseases are treated in March to July, 2011. Samples taken are saturated sample with accidental sampling method, which is 59 people. Data analysis using Chi-Square test.*
Results: *The analysis showed no relationship between age and uterine myoma (p value> α (0.05)) and there is a relationship between parity with the incidence of uterine myoma (p value <α (0.05)).*
Conclusion: *Further research is needed with the bigger number of samples than this study and the cohort studies may be better for this study.*

Keywords: *age-parity-myoma uteri*

INTRODUCTION

One of the diseases of the female reproductive system is myoma uteri [1]. Myoma uteri is a benign tumor most often found, it was found one in four active women of reproductive age. This number can estimates that the incidence of uterine myoma approximately 20-30% of all women. In the United States, there are 650,000 hysterectomies every year, 27% (175,000) of the cases of hysterectomy due to uterine myoma [6]. In Indonesia, myoma uteri was found from 2.39 to 11.7% of all gynecological patients were treated [2]. The majority (about two thirds) of women with uterine myomas are asymptomatic. The emergence of symptoms depends on the number, size, location, state and condition (usually supply of blood vessels) tumors [4]. At Dr. Soewondo Hospitals in Kendal Regency, in 2010 there were 47 cases of uterine myoma, the majority of sufferers are middle adult women (40 to <60 years old) and primiparas.

Based on previous research by Ririn Ariyani tells us that 65% of patients with myoma uteri aged > 35 years to < 50 years. The high incidence of uterine myoma at reproductive age indicate a relationship with estrogen myoma uteri. At the time of menopause, myoma uteri regression occurs

because both ovaries no longer produce estrogen again [6]. Based on the theory Genitoblast (cell nest) Meyer and De Snoo declare every month continuous stimulation of estrogen affects the growth of uterine myomas [5]. Based on the autopsy, Noval suggests that 27% of women who aged 25 years have a myoma nest, from 27% of women with the myoma nest, 50% found in the black woman and 25% in white woman [2].

Effects myoma uteri in pregnancy depends on the size and position of the tumor. If the tumor led to a distortion of the uterine cavity, the risk of spontaneous abortion to be doubled and the increased likelihood of preterm labor.Tumors in the lower part of the uterus can cause obstruction of the birth canal, thus inhibiting vaginal deliveries [1]. Moreover, myoma uteri can also cause infertility through distortion or block the fallopian tubes [8].

After birth, a woman's life is divided into several periods, namely infants, children, puberty, reproduction, klimaksterium and senium. Myoma uteri are not found in children who do not menstruate [5]. Myoma uteri is most common in women aged 35-45 years (approximately 25%) and rarely found in women aged 20 years. After menopause only about 10% myomas that are still growing. The uterine myoma is said to be experiencing downsizing after menopause.Based on previous research by Siti Mursidah said that 63.4% of patients with myoma uteri is primiparas. The possibility of developing of uterine myoma in women who gave birth less often than women who were never pregnant or just had a single pregnancy [1].

METHODS

The design of this research is analytic survey research using case control method.In this research there are independent variables are age and parity and the dependent variable is myoma uteri.The study was conducted at Dr. Soewondo Hospitals in Kendal Regency in July 2011. The population of this study were women with gynecological diseases at Dr. Soewondo Hospitals in Kendal Regency from January 2011 to April 2011. A sample is taken using a non-random (non probablity) sampling with accidental sampling, ie taking cases or respondents who happen to be there or available. Samples taken are all cases in the population (total sampling).

Case criteria determined in advance which patients with myoma uteri is numbered 29 people, and then determine the control criteria that patients with gynecological diseases besides myoma uteri by the same amount that is 29 people. Data were collected by study of the documentation and analyzed retrospectively. The instruments used in data collection study is to use a checklist. This checklist contains a list of variables to be collected in the form of a column of data by age, parity and suffer from myoma uteri or not.Data analysis was performed after the data is collected. Analysis of the data used univariate and bivariate analysis. Univariate analysis used to determine the frequency distribution and percentage of each variable. The bivariate analysis conducted on two variables were related or correlated, which is independent variables (age and parity) and the dependent variable (myoma uteri) using Chi-Square test with a confidence level of 95%, then the data is processed using a computer with SPSS.

RESULTS

Based on the results of research on age and parity in women who were treated at the "Mawar" Lounge in Dr. Soewondo Hospitals in Kendal Regency can be seen in the following table.

Table 1. Characteristics of respondents

Parameters		Frequency	Percentage
Age		Frequency	Percentage
	< 35 yo	15	25,9
	35 – 45 yo	27	46,6
	> 45 yo	16	27,6
	Total	58	100
Parity			
	Nulliparous	20	34,5
	Primiparas	16	27,6
	Multiparas	11	19,0
	Grande multiparas	11	19,0
	Total	58	100
Myoma uteri			
	Yes	29	50
	No	29	50
	Total	58	100

Shown in Table 1, the frequency distribution of respondents by age showed that most are aged 35-45 years is 46.6% and the least was <35 years is 25.9%. The frequency distribution of respondents by parity shows that most are nulliparous respondents which is 34.5% and the least was multiparas and grandemultiparas with the same percentage of 19%. By the incidence of uterine myoma showed 50% of respondents suffered from myoma uteri and 50% of respondents never experienced myoma uteri.

Table 2. Relationship between age and parity to the incidence of uterine myoma

Parameters			Incidence of Myoma Uteri			P value
			Yes (case) %	No (control) %	Total	P value
Age						
	< 35 yo	N	6	9	15	
		%	20,7 %	31,0 %	25,9 %	
	35 – 45 yo	N	18	9	27	0,054
		%	62,1 %	31,0 %	46,6 %	
	> 45 yo	N	5	11	16	
		%	17,2 %	37,9 %	27,6 %	
	Total	N	29	29	58	
		%	100 %	100 %	100 %	
Parity						
	Nulliparous	N	14	6	20	
		%	48,3 %	20,7 %	34,5 %	
	Primiparas	N	10	6	16	
		%	34,5 %	20,7 %	27,6 %	0,012
	Multiparas	N	3	8	11	
		%	10,3 %	27,6 %	19 %	
	Grande multiparas	N	2	9	11	
		%	6,9 %	31,0 %	19,0 %	
	Total	N	29	29	58	
		%	100 %	100 %	100 %	

Presented in Table 2, the relationship between age and incidence of myoma uteri obtained from calculations using formulas Chi-Square with a confidence level of 95% or $\alpha = 0.05$ was not significant, obtained at 0.054. The present study highlighted a significant relationship between parity and incidence of myoma uteri with p value of 0.012.

DISCUSSION

The study was conducted on 58 respondents in Dr. Soewondo Hospitals inKendal Regency, Indonesia, in January to April 2011. In this study concluded that there was no significant relationship between age and incidence of uterine myoma in Dr. Soewondo Hospitals in Kendal Regency based on the results of Chi-square test with p value of 0.054.

In theory, there are several factors that affect the incidence of uterine myoma in addition to the age of the patient, one of which is due to hormonal factors. Allegedly one of the factors associated with the development of myoma uteri are hormonal factor that is the hormones estrogen and progesterone. Myoma rarely occur at puberty, increases in the reproductive age and regress after menopause [3]. Myoma uteri most commonly found at the age of 35-45 years (approximately 25%) and has never been found before menarche [2]. Although these results were not statistically there is a relationship between age and uterine myoma, but look at the results of the frequency distribution of clinical myoma uteri is more common in women aged 35-45 years. It is the same as that expressed by previous research by Ririn about a descriptive study of patients with myoma uteri were mostly (65%) patients with myoma uteri were women aged > 35 years and < 50 years. However, in this study shows that at Dr. Soewondo Hospitals in Kendal Regency there is no relationship between the incidence of uterine myoma with a woman's age. This can happen because the population and a sample obtained by researchers is limited.

Data obtained from studies in Dr. Soewondo Hospitals in Kendal Regency showed that of 29 patients with myoma uteri respondents, most commonly found in nulliparous women is 14 respondents and the primiparas 10 respondents and in multiparas 3 respondents. At least match grandemultiparas which is 2 respondents.

The analysis of the relationship between parity with the incidence of uterine myoma, the results of Chi Square test results obtained p value of 0.012 so it can be concluded that there is a significant relationship between parity with the incidence of uterine myoma in Dr. Soewondo Hospitals Kendal. This strengthens the existing theory that there is a relationship about myoma uteri with parity. The possibility of developing of uterine myoma in women who gave birth less often than women who were never pregnant or just had a single pregnancy. From the statistical and clinical outcomes, uterine myoma most commonly found in nulliparous. In addition to strengthening the theory, these results also reinforce previous research by Siti Mursidah who stating that the majority of patients with myoma uteri are nulliparous. Uterine fibroids are more common in nulliparous women or infertile. Hereditary factors also play a role in this matter. Myoma uteri are more common in nulliparous women or infertile likely due to estrogen receptors continuously during the menstrual cycle. Where stimulation of estrogen can stimulate the growth of cells myoma itself. The longer the exposure to estrogen such as obesity or early menarche, will further increase the incidence of uterine myoma.In this study there is agreement between theory and reality on the ground, that myoma uteri is commonly found in nulliparous women and the number decreased in women who are said to be infertile or have more than one child. In this study also found myoma uteri occur in women who have more than one child.This can occur due to other factors that affect the growth of uterine myomas such as heredity, family history, age of menarche or weight.

CONCLUSION AND RECOMMENDATION

Based on the results of research and discussion that has been described previously, it can be concluded found 29 cases of uterine myoma in January to April 2011. Of the 29 cases of uterine fibroids occur most commonly at the age of 35 to 45 years which is there were 18 cases (62.1%). Using the statistical test Chi Square obtained p value of 0.054.The test means that there is no relationship between age and uterine myoma in Hospital Dr. H. Sowondo Kendal. Based on 29 cases of uterine myoma, mostly found in the nulliparous group with 14 cases (48.3%). Using the statistical test Chi Square obtained p value of 0.012. The test means that there is a relationship between parity with myoma uteri in Dr. Soewondo Hospitals in Kendal Regency.

For the women in order to further enhance the knowledge of myoma uteri in order to know the early symptoms of uterine myoma and should immediately contact health professionals if you find symptoms of uterine myoma so get treatment early. For further research, in conducting the study are expected to multiply the number of samples so that research can represent the actual incidence of uterine myoma in reality.

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