## **CASE REPORT:**

# Characteristics of uterine myoma patients at inpatient rooms of dr. Soepraon 2nd Grade Military Hospital, Malang

### **Reny Retnaningsih, Zainal Alim**

Midwifery Program of Health Polytechnics, dr. Soepraon Hospital, Malang, Indonesia

## ABSTRACT

**Objectives**: The aim of this study was to discover the characteristics of uterine myoma patients at the inpatient rooms of dr. Soepraon 2nd Grade Military Hospital, Malang.

Case Report: Women reproductive system is prone to health problems, one of them is uterine myoma which being detected through pathology anatomy examination and shows an increasing prevalence (70%) nowadays. In Indonesia, the cases of uterine myoma reach 2,39 - 11,7%, placing second right after cervical cancer. The aim of this study was to discover the characteristics of uterine myoma patients at the inpatient rooms of dr. Soepraon 2nd Grade Military Hospital, Malang. The research design used in this study was case report. Population of this study included uterine myoma patients who were being treated at the inpatient rooms of dr. Soepraon 2nd Grade Military Hospital, Malang in between the period of January - December 2017 with a total of 82 patients. The sampling method used was total sampling. Sample of this study was acquired through secondary data in the form of medical records. The result of this study showed that the highest number of case was in the 50 - 54 years old age group (53.3%), the most common education background was high school graduates (46%), the most common occupation group was the unemployed (59%). the most common surgical therapy done was myomectomy (89%), the most common myoma was submucous myoma (46,3%) and the most common parity status was multipara (44%).

**Conclusion**: Women aged 45 and older with multipara history are advised to maintain their reproductive health through healthy eating pattern, regular exercise and regular check-ups to detect the possibility of developing uterine myomas early.

Keywords: Uterine myoma, Risk factors of uterine myoma

#### ABSTRAK

**Tujuan**: Tujuan penelitian untuk mengetahui karakteristik penderita mioma uteri di ruang rawat inap Rumah Sakit Tentara Tingkat II dr. Soepraoen Malang.

Laporan Kasus: Kesehatan reproduksi wanita rentan terjadi masalah, salah satunya adalah mioma uteri yang prevalensinya mengalami peningkatan (70%) dengan pemeriksaan patologi anatomi uterus. Di Indonesia, kasus mioma uteri sebesar 2,39-11,7% dan penyakit ini menempati urutan kedua setelah kanker serviks. Tujuan penelitian untuk mengetahui karakteristik penderita mioma uteri di ruang rawat inap Rumah Sakit Tentara Tingkat II dr. Soepraoen Malang. Metode penelitian yang digunakan adalah case report. Populasi pada penelitian ini adalah semua data penderita mioma uteri yang dirawat inap di Rumah Sakit Tentara Tingkat II dr. Soepraoen Malang pada bulan Januari - Desember 2017 dengan jumlah 82 penderita. Pengambilan sampel menggunakan Total sampling. Pengambilan data menggunakan data sekunder pada rekam medis. Hasil penelitian menunjukkan, berdasarkan usia penderita mioma uteri tertinggi pada kelompok umur 50-54 tahun 53,3%, tingkat pendidikan tertinggi pada kelompok SMA 46%, pekerjaan tertinggi pada kelompok tidak bekerja 59%, jenis operasi tertinggi pada jenis operasi miomektomi 89%, jenis mioma tertinggi pada mioma sub mukosa 46,3% dan berdasarkan paritas tertinggi pada multipara 44%

Simpulan: Saran bagi wanita usia diatas 45 tahun dan multipara lebih menjaga kesehatan reproduksinya dengan pola makan yang sehat, olahraga yang teratur dan rutin memeriksakan diri untuk deteksi dini kemungkinan mioma uteri.

Kata kunci: Mioma Uteri, Faktor Resiko Penderita Mioma Uteri

\*Correspondence: Renny Retnanigsih, Midwifery Program of Health Polytechnics dr. Soepraon Hospital, Malang, email : renyretna87@gmail.com.

pISSN:0854-0381 • eISSN: 2598-1013 • doi: http://dx.doi.org/10.20473/mog.V28I22020.89-92 • Maj Obs Gin. 2020;28:89-92 • Received 31 Jul 2019 • Accepted 10 Jan 2020

• Open access under CC-BY-NC-SA license • Available at https://e-journal.unair.ac.id/MOG/

# INTRODUCTION

One of the important indicators in achieving good health is through paying attention to women's health especially female reproductive health. Reproductive health is associated with a lot of aspects and is the parameter for a country's ability in providing health services.<sup>1</sup> There are many problems in female reproductive health area, including the uterine myoma that has being an increasing up to 70% through pathology anatomy examination.<sup>2</sup> Uterine myoma is one of the benign tumor doesn't have capsule but has a clear border and is made up from uterine muscles and its' supporting tissues. The development of benign tumor from immature smooth muscles is namef after the location it developed in, such as fibromyoma, leiomyoma, and fibroid.<sup>3</sup>

The National Center for Chronic Disease Prevention and Health Promotion in the United States reported that the proportion of uterine myoma in patients who underwent hysterectomy was 44.2% in 2000 and 38.7% in 2004.4 Medical Surveillance Monthly Report, Armed Force of the United States reported 11.931 cases of uterine myoma between 2001 – 2010 (incidence rate of 57,6 per 10.000 every year) in reproductive age women population.<sup>5</sup> In the United States, excessive bleeding due to myoma is one of the indication of hysterectomy and it is predicted that around 600.000 procedures are done every year. The exact number of myoma patients is yet to be known due to many patients who did not visit the doctor because they did not experience any symptoms. However it is predicted that the incidence of uterine myoma is about 20 - 30% out of overall women population.

In Indonesia, uterine myoma cases were found to be around 2.39 - 11.7% out of all gynecology patients and the number of the incidence to this disease placed second as the most prevalent right after cervical cancer.<sup>3</sup> Uterine myoma is the development of growing benign cells from uterine smooth muscles. This benign neoplasm comes from uterine smooth muscles and its' supporting tissues, thus known as fibromyoma, leiomyoma, and fibroid. Uterine myoma is the most common uterine tumor. It is predicted that 20% of women aged 35 years old suffer from uterine myoma even though no symptoms were seen.<sup>6</sup>

Factors causing uterine myoma are still uncertain to this day, but 2 theories explained the causal factors of uterine myoma. The stimulation theory stated that estrogen plays a part as an indicator factor. Aside from that, there is also cell nest or genitoblast theory that claimed uterine myoma that depends on the immature muscle cells which located in the cell nest. 7 According to Parker (2007) the risk factor causing uterine myoma are age, endogenous hormones, family history, body

mass index (BMI), diet, pregnancy, parity, and smoking habit.

Generally, surgery is not performed to eliminate myoma during pregnancy, as well as induced abortus. If red degeneration happens to a myoma, usually a conservative therapy alongside with bed rest and close observation give a quite satisfactory outcome. Antibiotics are not useful in this case because the inflammation does not involve bacteria. However if deemed needed, trial laparotomy may be performed and the next treatments depend on what was found on the examination. If myoma is in a way of child birth, caesarian section should be performed. During puerperium, myoma is left alone unless there are acute, blighting symptoms. The removal of it is done as soon as possible in a span of three months, however at that time myoma may already be tiny enough to not require any surgery.<sup>2</sup>

Government efforts in achieving optimal health status does not only aim to reduce maternal mortality but also to reduce morbidity in women. One of those efforts was through government policies on reproductive health through the essential reproductive health package program (PKRE) and comprehensive reproductive health package (PKRK) aimed for all Indonesian, in order to achieve good reproductive health.<sup>9</sup>

Based on preliminary study at the medical record installation of dr. Soepraon Hospital, Malang and data obtaines in 2017 the incidence of uterine myoma was seen in 82 out of 463 gynecological patients (17.7%). Through these data, it is concluded that the incidence of uterine myoma is quite high at dr. Seopraon Hospital, Malang.

The research design of this study was case report. The research was conducted at inpatient rooms of dr. Soepraon Hospital, Malang. The main population of this study is all uterine myoma patients who were being treated at inpatient room of dr. Soepraon 2nd Grade Military Hospital, Malang in between the period of January – December 2017 with a total of 82 patients. The sampling technique used in this study was total sampling. Data of this study was acquired through secondary data from medical records. The study variables were socio demographic characteristics (education background, age, and job), history of surgery, type of myoma, and parity,

## CASE REPORT AND DISCUSSION

According to Table 1 there were 82 respondents who suffered from uterine myoma, most of which aged 50 - 54 years old, making up to 29 women (35.5%). Meanwhile the least patients were seen in the age group of 25 - 29 years old, which was only 1 woman (1.21%).

The highest incidence of uterine myoma was between the age of 35 - 50 years old which was close to 40%, however it was very rarely found at the age under 20 years. Meanwhile, at the menopausal age, this case was almost never found.10 Theoretically, uterine myoma occurs due to hormonal factors (estrogen stimulation) which is being influenced by age. According to Said (2004), at the age before menarche, estrogen levels are low and later increases at reproductive age, then decreases during menopause. Thus, from this theory it can be concluded that age had a relation to the incidence of myoma.<sup>11</sup>

Table 1. Age distribution of uterine myoma patientstreated at Tulip Room of dr. Soepraon 2ndGrade Military Hospital

Age	Frequency	(%)
25-29 years old	1	1.21%
30-34 years old	3	3.65%
35-39 years old	5	6.09%
40-44 years old	18	22.0%
45-49 years old	24	29.2%
50-54 years old	29	35.3%
55-59 years old	2	2.43%
Total	82	100%

Table 2.Education background distribution of uterine<br/>myoma patients treated at Tulip Room of dr.<br/>Soepraon 2nd Grade Military Hospital

Education background	Frequency	(%)
Elementary school graduates	5	6%
Junior high school graduates	31	38%
Senior high school graduates	37	46%
University graduates	9	10%
Total	82	100%

According to Table 2 almost half of the uterine myoma patients were high school graduates, which were 37 patients (46%) and minority of patients were elementary school graduates, which were 5 patients (6%).

Table 3. Job distribution of uterine myoma patientstreated at Tulip Room of dr. Soepraon 2ndGrade Military Hospital

Job	Frequency	(%)
Housewives	49	59%
Laborers	8	10%
Farmers	4	5%
Merchants	16	20%
Civil servants/	5	6%
private company employees		
Total	82	100%

Based on the table above, it was found that out of 82 respondents who suffered from uterine myoma, 49 of them were housewives (59%) and a small part of them

which were as many as 5 people (6%).

worked as civil servants or private company employees

Table 4.Distribution of type of surgery performed on<br/>uterine myoma patients treated at Tulip<br/>Room of dr. Soepraon 2nd Grade Military<br/>Hospital

Gynecological	Frequency	(%)
history		
Hysterectomy	8	9.75%
Myomectomy	73	89.0%
Curette	1	1.2%
Total	82	100%

Based on the table above, it was discovered that out of 82 women who suffered from uterine myoma most of which had myomectomy amounting as many as 73 respondents (89%). While the least performed surgery was curette which was performed in one respondent (1.2%).

Table 5.Type of myoma distribution in uterine myoma<br/>patients treated at Tulip Room of dr.<br/>Soepraon 2nd Grade Military Hospital

Type of myoma	Frequency	(%)
Submucous myoma	38	46.3%
Intramural myoma	18	22.0%
Subserosal myoma	26	31.7%
Total	82	100%

Based on the table above, it was known that from 82 respondents who suffered from myomas, almost half of them suffered from submucous myoma which were as many as 38 respondents (46.3%) while the least type was intramural myomas suffered by 18 respondents (22.0%). Submucosal myomas are generally located under the endometrium and protrudes into the uterine cavity. This type often shows complaints of bleeding disorders. While other types of larger myomas do not show complaints of bleeding, submucous myomas, although small, often show complaints of bleeding disorders.<sup>10</sup> The most common symptom of uterine myoma is abnormal bleeding. Myoma can cause profuse bleeding during period, long periods, dysmenorrhoea, and spotting between menstrual cycles if it is located on the endometrial line or in the uterine blood vessels. Although uterine myoma does not influence ovulation, several previous studies concluded that uterine myoma might cause decreased pregnancy outcomes. Myoma uteri is a benign tumor of the uterine muscle along with its connective tissue. Uterine myomas have clear border, does not have any capsules, and originate from the smooth muscle of fibrous tissue, thus uterine myomas can be solid if the dominant part is connective tissue but it can also be soft if the dominant part is the uterine muscle.

Table 6. Parity distribution in uterine myoma patientstreated at Tulip Room of dr. Soepraon 2ndGrade Military Hospital

Parity	Frequency	(%)
Nullipara	23	28.0%
Primipara	23	28.0%
Multipara	36	44.0%
Total	82	100%

Based on the table above, out of 82 respondents suffering from uterine myoma, almost half of them had multipara parity status which were as many as 36 respondents (44.0%). While a small portion of the population had primipara parity status which were 23 respondents (28.0%). In the other side, there were 23 patients (43%) with nulliparous parity

Many theories stated that hormonal factors (estrogen stimulation) affected the incidence of myoma. Parker (2007) stated that the more pregnancy experienced, the lower the risk of getting uterine prolapse. The risk decreased by 20% - 50% through giving birth to at least 1 child. Meanwhile Chen found that the risk of uterine myoma decreased by 70% in women who gave birth to 2 or more children.<sup>7</sup>

# CONCLUSION

The highest number of case happened in the 50 - 54 years old age group (53.3%). Almost half of uterine myoma patients were high school graduates which were as many as 37 people (46%). Most of patients with uterine myoma was unemployed housewives which were as many as 49 people (59%). Myomectomy was the most frequent procedure, it was performed on 73 respondents making up to 89% of the population. Almost half of the patients had submocous myoma, counting as many as 38 respondents (46.3%). Multiparity status was seen in 36 respondents (44.0%), this was almost half of the population.

Women aged 45 and older with multipara history are advised to maintain their reproductive health through healthy eating pattern, regular exercise and regular check-ups to detect the possibility of developing uterine myomas early. Meanwhile, hospitals are advised to have a complete records in patients' history including the contraceptives used, the menstrual history, and the duration of treatment.

## REFERENCES

- 1. Lubis SZ., Lubis R, Jemadi. Karakteristik penderita mioma uteri rawat inap di Rumah Sakit Tentara TK-IV 01.07.01. Pematang Siantar. 2014.
- Prawirohardjo S. Penyakit Neoplasma. In: Ilmu Kebidanan. Bina Pustaka Sarwono Prawirohardjo. 2011. p. 891-3.
- Wiknjosastro, Syapifudin AB, Rachimhadi T. Ilmu Kandungan. Bina Pustaka Sarwono Prawiroharjo. 2010. p. 716.
- Whiteman MK, Hillis SD, Jamieson DJ, et al. Inpatient hysterectomy surveilance in The United States 2000-2004. American Journal of Obstetric and Gynecology. 2008;198(134).
- Armed Forces Health Surveilance Center (AFHSC). Uterine Fibroids, Active Component Females, US Armed Forces, 2001-2010. Medical Surveillance Monthly Report. 2011;18(12).
- Pratiwi L, Suparman E, Wagey F. Hubungan usia reproduksi dengan kejadian mioma uteri di RSUP Prof. Dr. RD Kandao Manado. Jurnal e-Clinic (eCl). 2013;1(1):26-30.
- Kostania, G. Hubungan umur penderita dengan mioma uteri di RSUD Dr. Moewardi Surakarta bulan Januari-Juni 2008. Undergraduate Thesis. Fakultas Kedokteran Universitas Sebelas Maret. Surakarta. 2009
- Parker, WH. Etiology, symptomatology, and diagnosis of uterine myomas. Department Of Obstetrics and Gynecology UCLA School Medicine: California: American Society for Reproductive Medicine. 2007;87.
- 9. Manuaba. Memahami reproduksi wanita. ECG. 2010
- 10. Wiknjosastro H, et al. Ilmu Kandungan, Second edition. Yayasan Bina Pustaka. 2005:338-344.
- Agustian W, Kurniawan, Azhari A. Hubungan usia dan paritas dengan kejadian mioma uteri di RSUP dr. Muhammad Hoesin Palembang periode Januari 2011-Januari 2012. Syifa Medika. 2013:4(1).
- 12. Descherney. Operative delivery. In: Current Diagnosis and Treatment Obstetric & Gynecologist 10th edition. McGraw Hill Companies. 2010.