

CASE REPORT MEDICAL DELIVERY CARE IN NY. M G1P0A0 AGE 26 YEARS OF PREGNANCY AGE 41 WEEKS WITH PREMATURE RUPTURE OF MEMBRANES (PROM) AT ROEMANI MUHAMMADIYAH HOSPITAL SEMARANG

Nur Gris Tanty Amin¹ Umi Khasanah² Erna Kusumawati⁴ Siti Nurjanah⁵

^{1.2}Midwife Professional Education Department, University of Muhammadiyah Semarang ^{3.4}Midwifery Undergraduate Department, University of Muhammadiyah Semarang

Corresponding author : umikhasanah@unimus.ac.id

ABSTRACT

Childbirth is a process of expulsion of the products of conception. This phase takes place when the fetus is mature to live outside the womb. Normal or spontaneous labor usually lasts for 18 hours without complications. The cause of maternal death in Indonesia is caused by one of them, namely premature rupture of membranes (PROM). Premature rupture of membranes is the spontaneous rupture of the membranes before entering the labor phase. Premature rupture of membranes can be caused by weakening of the amniotic membrane accompanied by continuous uterine contractions. The purpose of this study was to provide midwifery care for mothers with premature rupture of membranes (PROM) using the 7-step Varney approach. The method used in this research is a case study. The location of this case study was conducted at Roemani Muhammadiyah Hospital, Semarang. As for the subject of the case study is the mother who experienced PROM. The time of the implementation of this case is the administration of Ringer Lactate infusion as much as 20tpm and providing moral support to reduce maternal anxiety. After being given 2 days of care, the result is that the mother's general condition is good and the baby has been born safely After being given midwifery care for 2 days, the mother has given birth safely.

Keywords: Labor, KPD

1. INTRODUCTION

According to data from the World Health Organization (WHO), the maternal mortality rate (MMR) in the world in 2017 was 211 per 100,000 live births (KH) or an estimated number of maternal deaths was 295,000 deaths per year. The maternal mortality rate (MMR) is an important indicator to see the importance of the health status of a nation and is one of the components of the development index and quality of life index (Sumarmi, S;, 2017).

In 2015 the target of AKA and IMR will be achieved. The causes of death were low birth weight (29%), asphyxia (27%), problems giving water (10%), hematological disorders (6%), infection (5%), and other causes (13%) (Setiawati, Y, Nurafni ;A, 2019).

Neonatal health services include coverage of the first neonatal visit or KN1 which is an indicator that describes health efforts made to reduce the risk of death in the neonatal period, namely 6-48 hours after birth which includes visits using an integrated management approach for young children (MTBM) including infant care counseling. newborns, exclusive breastfeeding, administration of vitamin K1 injection and hepatitis B0 injection if it has not been given.

RI government regulation number 87 of 2014 concerning population development and family development, family planning, and family information systems states that the family planning program (KB). In its implementation, the target of implementing the family planning program is that couples of childbearing age (PUS) are married couples who are involved in a legal marriage, whose wives are between 15 and 49 years old (Indonesian Health Profile 2017).

Based on a preliminary study conducted on 30 June – 28 July 2022 at Roemani Muhammadiyah Hospital Semarang, it was found that mothers gave birth with KPD.



2. CLINICAL FINDINGS

Based on the results of the case of MEDICAL CARE FOR DELIVERY IN NY. M G1P0A0 AGE 26 YEARS OF PREGNANCY 41 WEEKS WITH Premature Rupture of membranes (PROM) clinical findings were obtained, namely pregnant women who wanted to give birth at 41 weeks of age complained of premature rupture of the membranes. Based on the complaints that the mother felt and based on the results of the examination carried out, the mother is currently experiencing premature rupture of membranes (PROM).

3. HISTORY OF DISEASE

Based on the results of the anamnesis, Mrs. M has never suffered from inherited diseases such as hypertension, DM and a history of infectious diseases such as hepatitis, tuberculosis and HIV/AIDS, and has no history of degenerative diseases such as tumors, cancer of the reproductive organs.

4. DIAGNOSTIC CHECK

Based on the anamnesis and clinical findings of the diagnostic examination carried out on Ny. M is to perform a Haematological examination which includes hemoglobin, leukocytes, platelets, hematoctites and erythrocytes. This diagnostic examination is carried out to determine whether the mother has anemia or not.

Based on the diagnostic tests that have been carried out, the following results were obtained:

Table 1. Haematology	examination results
----------------------	---------------------

Inspection	Results	Referral	Unit
		value	
Hemoglobin	12.8	13.0 -	g/dl
		18.0	

5. DIAGNOSIS

Based on subjective data and objective data, the diagnosis of Ny. M age 26 years P1A0 41 weeks gestational age single fetus live intra uterine longitudinal position PUKA preskep with PROM.

6. THERAPY INTERVENTION

Based on the diagnosis obtained, the treatment given to Mrs. M is to give Ringer Lactate infusion therapy

7. FOLLOW-UP

Based on the results of the case of midwifery care carried out on Ny. The follow-up that was given was to give birth immediately.

8. DISCUSSION

Based on the results of the subjective data assessment, the mother said that the water came out of the birth canal on 28.07.2022 at 02.20WIB. Mother said her pregnancy had passed the interpretation of childbirth. Mother's HPHT is 14.10.2021. At term gestational age, the risk of PROM is higher because the intrauterine pressure increases so that it presses on the membranes, causing premature rupture of the membranes. This statement is in line with the research results(Handiani, 2021)which states that there is a significant relationship between gestational age and the incidence of PROM.

Supported by the results of other studies which state that mothers with gestational age at term are 3,300 times more likely to experience premature rupture of membranes compared to preterm and postterm gestational ages.(Maria & Sari, 2017). This is in line with the research results(Nurfianto et al., 2019)which states that PROM can occur at all gestational ages, namely preterm, term and postterm.

The results of the assessment of objective data showed that there was clear fluid in the genitalia and the results of the litmus test were positive. This is in line with the theory according to(Metti, 2021)which states how to diagnose PROM can be done with the nitrazine test or a test using litmus paper. Mothers experience PROM if the test results change color from pink to blue. Based on the results of the assessment of subjective and objective data, it can be concluded that the mother has PROM.

The handling of the PROM case at the Roemani Muhammadiyah Hospital, Semarang, was induction of labor using RL infusion and 5 IU of oxytocin. This statement is in accordance with the results of the study(Sinaga, 2020)which states that one of the indications for labor induction is KPD.

According to research (Kulhan & Kulhan, 2019) induction using oxytocin is more effective than using dinoprostone. This is in line with research (Hasriani, 2017) which stated that there was an effect of giving oxytocin on cervical opening in a variety of labor cases. the average



acceleration of cervical dilatation in labor cases was PROM (23.4%), serotinus (21.60%), uterine inertia (18.30%), preeclampsia (13.30%), average cervical dilatation failure rate in cases of PROM (1.70%), serotinus (3.30%), uterine inertia (6.70%), and preeclampsia (11.70%). Which means, giving oxytocin in cases of PROM is the right way to handle these cases.

According to other research conducted(Covinos et al., 2019)stated that there was no difference in labor induction using misoprostol and oxytocin in the duration of the latent phase, active phase, duration of fetal labor, placental delivery, fetal distress, type of labor termination and Apgar at I or 5 minutes. There was a significant difference for complications during expulsion, the rate of postpartum hemorrhage, uterine hypotonia, and a longer expulsive period were higher in the misoprostol group while for oxytocin the most frequent complication was retained placenta. Thus, it can be concluded that the use of oxytocin is safer to use for labor induction. In line with research results(Reni & Sunarsih, 2017)stated that oxytocin is effective given intravenously in women giving birth with indications of KPD.

9. CONCLUSION

After being given care for 2 days, mothers giving birth with KPD can be handled.

10. SUGGESTION

Can provide integrated and comprehensive services in providing health services, especially for mothers in labor with KPD.

REFERENCES

- Subiastutik, E., & Maryanti, SA (2022). Instructions for Childbirth Midwifery Care (M. Narudin (ed.); print pp). NEM
- [2] Sulfianti, Indryani, Purba, DH, Sitorus, S., Yuliani, M., Haslan, H., Ismawati, Sari, MHN, Pulungan, PW, Wahyuni, Hutabarat, J., Anggraini, DD, Purba, AMV, & Aini, FN (2020). Midwifery Care in Childbirth.
- [3] Abrar, NM, Handono, B., & Triyanti, GI (2017).
 Outcome Characteristics of Pregnancy With Premature Rupture of Membranes At Dr. Hospital. Hasan Sadikin Period 2013-2015.
 Journal of Health Systems, 2(4), 2015–2018. https://doi.org/10.24198/jsk.v2i4.12499

- [4] ACOG. (2017). ACOG Guidance Update : Diagnosis and Management of PROM (Prelabor Rupture of Membranes). ObG Project, 1–8. <u>https://www.obgproject.com/2017/12/29/acog-guidance-update-diagnosis-management-promprelabor-rupture-membranes/</u>
- [5] Amiyanti, NP (2021). Relationship Between Bacteriuria and Leukocyturia in Premature Rupture of Amniotic fluid [Trisakti University]. <u>http://repository.trisakti.ac.id/usaktiana/index.p</u> <u>hp/home/detail/detail_koleksi/6/SKR/penerbit/</u>000000000035385/6#
- [6] Central Java Provincial Health Research and Development Agency. (2018). Report of Central Java Province Riskesdas 2018. In Ministry of Health RI.
- [7] Bainuan, LD (2018). Prevention of Premature Rupture of Membranes (Premature Rupture of Membranes) With Vitamin C Supplementation In Pregnancy. Journal.Stikesbaptist.Ac.Id, 17– 64.

http://jurnal.stikesbaptis.ac.id/index.php/PSB/a rticle/view/259

- [8] Conté, I., Alpha, DB, Eve, BO, Souleymane, T., Sory, BI, Kalil, SI, Ibrahima, S., Sory, SI, Telly, S., & Namory, K. (2020). Effect of premature rupture of membranes on the maternal and fetal prognosis during childbirth at the gynecologyobstetrics department of the Matam Communal Medical Center, Conakry, Guinea. International Journal of Reproduction, Contraception, Obstetrics and Gynecology, 9(3), 911. <u>https://doi.org/10.18203/2320-</u> 1770.ijrcog20200513
- [9] Covinos, LC de, Marroquin, EFD, Vargas, JE, & Ortiz, GO (2019). Effect of oxytocin and misoprostol in the induction of labor in pregnant women at term with premature rupture of membranes in regional Hospital Honorio Delgado. Universidad Catolica de Santa Maria.
- [10] Dartiwen, D., & Nurmala, C. (2020). The effectiveness of vitamin C supplements in pregnant women toward premature rupture of membranes. Journal of Aisyah: Journal of Health Sciences, 5(1), 27–34. https://doi.org/10.30604/jika.v5i1.237
- [10] Dayal, S., & Hong, PL (2021). Premature Rupture of Membranes. StatPears Publishing LLC.

https://www.ncbi.nlm.nih.gov/books/NBK532 888/



- [11] Semarang City Health Office. (2021). Semarang City Health Profile 2020. Health Office.Semarang.Go.Id, 14–17. <u>https://dinkes.semarangkota.go.id/asset/upload/</u> <u>Profil/Profil/Health Profile 2019.pdf</u>
- [12] Central Java Provincial Health Office. (2020). Government Agencies Performance Report 2020. 48.
- [13] Central Java Provincial Health Office. (2021). Central Java Health Profile. 3511351(24).
- [14] Fijri, B. (2021). Introduction to Midwifery Care (Print Pe). Civil Library Star.
- [15] Florence. (2021). Relationship of Premature Rupture of Membranes with Neonatal Sepsis Incidence: Systemic Review. Sari Mulia University, Banjarmasin.
- [16] Handiani, D. (2021). Factors Associated with the Incidence of Premature Rupture of Membranes in the Hospital. Journal of Health Sciences by Bunda Husada, 7(1).

- [17] Hasan, NA (2021). The Factors Affecting the Increase in the Incidence of Premature Ruptured Membranes in Term Pregnancy In RSUD Lanto Dg. Pasewang Janeponto 2016-2019. Muhammadiyah University of Makassar.
- [18] Hasifah, Irnawati, & Jumriah. (2020). Factors Associated with the Incidence of Premature Rupture of Membranes in Maternal Maternity at Salewangang Maros Hospital Scientific Journal of Health Diagnosis, 15(3), 291–295.
- [19] Hasriani. (2017). Evaluation of the Effect of Oxytocin on Cervical Opening in Variations in Labor Cases at Labuang Baji Hospital. Hasanuddin University.
- [20] Hidayati, NRT (2020). Literature Review Relationship of Urinary Tract Infection and History of Premature Rupture of Membranes with Premature Rupture of Membranes. Aisyiyah University Yogyakarta.
- [21] Hikmah, F., & Putri, YA (2017). Record