Treatment and Analysis of Clinical Rescue of Critical and Severe Pregnant and Lying-in Women

Zhengmei Zhang[1], Qiong WANG[2,*]

[1]Pingliang Kongtong District Hospital of Traditional Chinese Medicine, Pingliang, 744000 Gansu, China

[2]Pingliang Maternal and Child Health Hospital, Pingliang, 744000 Gansu, China

zzmgs066@163.com

*corresponding author

Keywords: Critical and severe, Pregnant and lying-in women, Rescue treatment, Answer

Abstract: Objective: To analyze the treatment methods and emergency strategies in the clinical rescue of critically severe pregnant and lying-in women. Methods: 60 critically ill pregnant women and bedridden women who were successfully rescued in our city from January 2018 to December 2021 were selected as the experimental group, and normal pregnant and lying-in women in our hospital at the same time were taken as the control group for research, and the treatment effect of critically severe pregnant and lying-in women was fully summarized. Results: Among the 60 cases selected, 55 were pregnant at 24-40 weeks. After admission, 10 cases were vaginal birth and 45 cases of cesarean section. At the same time, 51 cases cured and discharged from hospital, 4 cases were continued for treatment due to cerebral thrombosis, and the complications were pregnancy-induced hypertension, diabetes, heart failure, umbilical cord prolapse, etc. The complications included placental abruption, placenta previa, and postpartum hemorrhage due to weak uterine contractions. 5 cases of ectopic pregnancy were cured and discharged from hospital. It could be seen that the main causes of critical and severe conditions for pregnant women were pregnancy induced hypertension and obstetric bleeding. The cases of prenatal examination in the experimental group was lower than those in the control group, while the cases of high-risk factors was in the experimental group was higher than those in the control group ($P<0.05$). Conclusion: When rescuing critically severe pregnant women, we should fully consider the situation of critically severe women, combine clinical experience and professional knowledge, reduce the occurrence of complications, conduct high-risk screening for pregnant women, pay special attention to the existing high-risk factors, attach great importance to the bleeding situation and make relevant preparations for rescue, which can effectively reduce the incidence rate of critically severe women and improve the success rate of rescue.

1. Introduction

The obstetrics in grass-roots hospital is responsible for the treatment and rescue of critical and severe pregnant and lying-in women referred by the surrounding health centers. The annual outpatient volume is very large. Reviewing the existing data, it is found that critical and severe pregnant women often have some high-risk factors, and postpartum hemorrhage is the most important complication threatening the health and life safety of pregnant women. The complications include hypertension, diabetes, heart failure, umbilical cord prolapse, etc. The incidence rate of postpartum hemorrhage accounts for 3%~4% of the total number of deliveries. Postpartum hemorrhage is caused by uterine atony, which leads to postpartum hemorrhage during labor. The performance is diverse. The key to successful rescue is to predict and correctly deal with relevant high-risk factors. Therefore, it is essential to pay attention to the prediction of prenatal, intrapartum and postpartum hemorrhage and the key prevention and treatment of high-risk patients. The analysis report is as follows[1].

2. Data and Methods

2.1 General Data

From January 2018 to December 2021, 60 critically ill pregnant women and bedridden women who were successfully rescued in our city were selected as the experimental group, and normal pregnant and lying-in women in our hospital at the same time were taken as the control group for research.

Among which, 60 critically ill pregnant and lying in women in our city were successfully rescued, with the age of 20-39 years old, 18 cases of first birth, 37 cases of menstruation and 5 cases of ectopic pregnancy. Besides, 55 were pregnant at 24-40 weeks. After admission, 10 cases were vaginal birth and 45 cases of cesarean section. 51 cases cured and discharged from hospital, 4 cases were continued for treatment due to cerebral thrombosis, and the complications were pregnancy-induced hypertension, diabetes, heart failure, umbilical cord prolapse, etc. The complications included placental abruption, placenta previa, and postpartum hemorrhage due to weak uterine contractions. 5 cases of ectopic pregnancy were cured and discharged from hospital. 5 cases of ectopic pregnancy were cured and discharged from hospital. There were many kinds of critical and severe causes of pregnancy and lying in women. Targeted rescue measures were taken to ensure safe, timely and effective rescue. These cases were not transferred to hospital.

2.2 Methods

Our hospital set up a special rescue team for women in critical pregnancy and childbirth, including obstetricians, anesthesiologists, nurses and a psychological consultant. Uterine massage should be performed on all pregnant women with more postpartum vaginal bleeding. Uterine contraction drugs should be used to intervene, and uterine cavity residues should be actively cleaned up. Factors affecting uterine contraction should be dealt with. If pregnant women have blood coagulation dysfunction, corresponding blood coagulation factors should be supplemented according to the degree of treatment.

2.3 Observation Indicators

① Record the morbidity and rescue of pregnant and lying-in women and analyze the causes.

② Compare the prenatal examination and high risk factors between critical pregnant women and normal pregnant women.

③ Analyze causes of postpartum hemorrhage: the causes of postpartum hemorrhage caused by uterine atony, placental abnormality and ectopic pregnancy were mainly observed.

④ The diagnostic criteria of postpartum hemorrhage: postpartum hemorrhage refers to the one whose blood volume exceeds 500 mL within 24 h after the delivery of the fetus [2].

2.4 Statistical Method

SPSS26.0 software was used for statistical analysis, t-test was used, and the counting data was expressed as rate (%) χ^2 ($P<0.05$).

3. Results

3.1 Incidence and Rescue Treatment Plan of Critically Severe Pregnant and Lying-in Women

The incidence of critical and severe pregnant women in our hospital includes pregnancy diseases and complications. Pregnancy diseases include pregnancy induced hypertension, anemia and eclampsia. The main complications were diabetes and heart failure. Complications mainly include umbilical cord prolapse, placental abruption, placenta previa, uterine atony, hemorrhagic shock, obstetric bleeding, etc. From the rescue situation, pregnancy induced hypertension and obstetric bleeding were the most serious high-risk factors. The details were displayed in Table 1.

Table 1 Incidence and Rescue Treatment Plan of Critically Severe Pregnant and Lying-in Women

Pathogeny	Disease type	Cases	Rescue treatment
Gestational diseases	pregnancy induced hypertension	11	Choose a safer method of induced labor or perform cesarean section
	anemia	3	Iron supplements and folic acid, expand capacity if necessary
	eclampsia	0	Oxygen inhalation, spasmolysis, pressure control and diuresis
Complication	diabetes	2	Diet control and hypoglycemic drug treatment
	heart failure	2	Use diuretics and cardiotonic
Complication	umbilical cord prolapse	3	If there is skin damage, the wound should be disinfected with iodophor
	placental abruption	2	Cesarean section, blood volume expansion
	placenta previa	4	Cesarean section, promoting uterine contraction
	uterine atony	4	Psychological intervention, oxytocin
	hemorrhagic shock	2	Anti shock and strengthening uterine contraction
	obstetric bleeding	27	Partial hysterectomy when necessary to control bleeding and resist infection

3.2 Comparison of Prenatal Examination and High-Risk Factors

From the comparison of prenatal examination and high-risk factors between the two groups of pregnant women, the discovery rate of prenatal examination in the control group was significantly higher than that in the experimental group. From the perspective of high-risk factors, the experimental group accounted for 53.33%. From the comparison between the two groups, it could be found the importance of prenatal examination, as well as the value of timely rescue for critical and severe pregnant women. From the current level, grass-roots hospitals could also do a good job in prevention. The cases of prenatal examination in the experimental group was lower than those in the control group, while the cases of high-risk factors was in the experimental group was higher than those in the control group ($P<0.05$). The details were displayed in Table 2.

Table 2 Comparison of Prenatal Examination and High-Risk Factors [n; %]

Group	Cases(n)	Prenatal examination	High-risk factors
Control group	60	58(96.67)	12 (20.00)
Experimental group	60	23(38.33)	32 (53.33)
P value		<0.05	<0.05
χ^2 value		46.53	14.35

4. Discussion

With the increasing age of marriage and childbearing of women, the factors of high-risk groups are becoming more and more complex. About 15-18% of pregnant women may be accompanied by serious critical and severe predisposing factors. In the clinical practice of basic hospitals, the proportion of high-risk groups may be higher. Whether basic hospitals can better grasp the rescue and treatment of critical and severe pregnant women through clinical practice has practical significance for active treatment of pregnancy specific diseases. From the situation of pregnancy induced hypertension, the incidence rate of this disease is still very high. The main purpose and principle of the treatment of pregnancy induced hypertension is to stop pregnancy in such a way that the mother can fully recover, the fetus can survive after birth, and the damage to both mother and baby can be minimized. Later, whether to be hospitalized or receive treatment at home can be determined according to the severity subsequently [3]. In addition, the proportion of obstetric bleeding is also very heavy, which provides us with an important basis for prenatal examination, intrapartum and health management. There is also a need for hospitalization for critical eclampsia pregnant women early on, which can better prevent the occurrence of eclampsia complications. The occurrence of convulsions can be controlled through oxygen inhalation, spasmolysis, pressure control, and diuresis.

High attention should also be paid to critical and severe maternal complications such as heart failure and diabetes. There is often a risk of maternal death. Therefore, for critical pregnant women with heart disease, pre-pregnancy inspection and active control treatment should be carried out. The management of complications, including postpartum hemorrhage, umbilical cord prolapse, placental abruption, uterine rupture, etc., should be paid great attention. Especially, postpartum hemorrhage is the main cause of maternal death. It is necessary to control the amount of postpartum hemorrhage and necessary blood transfusion rescue preparation. For the shock of critical and severe pregnant and lying-in women, we should actively carry out rescue, establish effective venous circulation channels, and monitor the central venous pressure.

In conclusion, from the comparison between critical and severe pregnant women and normal pregnant women in the process of this experiment, we can understand several points. First, we should do a good job in prenatal consultation and inspection in detail to understand the situation of pregnant women. Second, it is essential to strengthen the intrapartum monitoring, further find out the changes of the high-risk factors of postpartum hemorrhage through observation, and do a good job in rescue at any time. Third, we should pay attention to the role of psychological intervention in critical and severe pregnant women, actively conduct psychological counseling and mental health education for her, and take various emergency treatment measures.

References

[1] Jin Haihong. Analysis and summary of pre-hospital first aid methods and nursing measures for pregnant and lying-in women with acute and critical diseases [J]. China Practical Medicine, no.14, pp.274-276, 2015.

[2] Liang Yanhong. Clinical rescue analysis of 36 critical pregnant and lying-in women [J] China Health Nutrition (first ten days in a month), vol.24, no.7, pp.3873, 2014.

[3] Geng Limei. Treatment and analysis of clinical rescue of 80 pregnant and lying-in women with acute and critical diseases [J]. China Rural Health, no.8, pp.8-9, 2015.