

MANAGEMENT OF PREGNANCY COMPLICATED BY EISENMENGER SYNDROME WITH SEVERE PULMONARY HYPERTENSION; A CASE REPORT

Nuswil Bernolian¹, Mareta Kurnia Desiani², Adrian Masno³, Yusni Puspita⁴

¹Maternal Fetal Medicine, Department of Obstetrics and Gynaecology, Moh Hoesin Hospital, Palembang, Sriwijaya University, Indonesia

²Recidency Programme, Department of Obstetrics and Gynaecology, Moh Hoesin Hospital, Palembang, Sriwijaya University, Indonesia

³Department of Cardiology, Moh Hoesin Hospital, Palembang, Sriwijaya University, Indonesia

⁴Department of Anesthesiology, Moh Hoesin Hospital, Palembang, Sriwijaya University, Indonesia

OBJECTIVE

Presenting a rare case pregnancy with Eisenmenger syndrome (ES) complicated with pulmonary hypertension (PAH). Management of ES in pregnancy is tricky and multidisciplinary team was assembled to manage the condition thoroughly.

CASE REPORT

A 32-year-old primigravida at 31 weeks of gestation presented with Eisenmenger syndrome complicated with pulmonary hypertension and IUGR. Patient was diagnosed with VSD since childhood and diagnosed with ES with severe PAH since 2017. Echocardiography revealed VSD subaortic 1.5 cm with bidirectional shunt, RA and RV dilation, and severe PAH

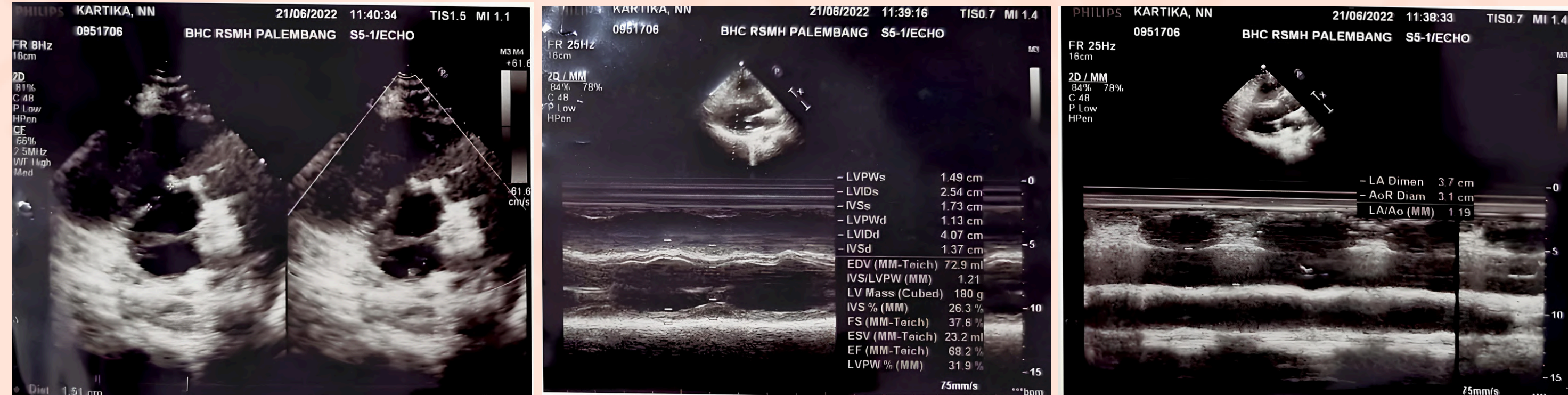


Figure 1. Mother's Echocardiography at June, 21st 2022

Swan-Ganz catheterisation was performed and severe pulmonary hypertension, non reactive with O₂ was concluded. The pulmonary arterial pressure is 90 mmHg with SpO₂ 75-86% daily.

Prenatal ultrasound at 29 weeks confirmed a single life fetus transverse lie with intrauterine growth restriction.

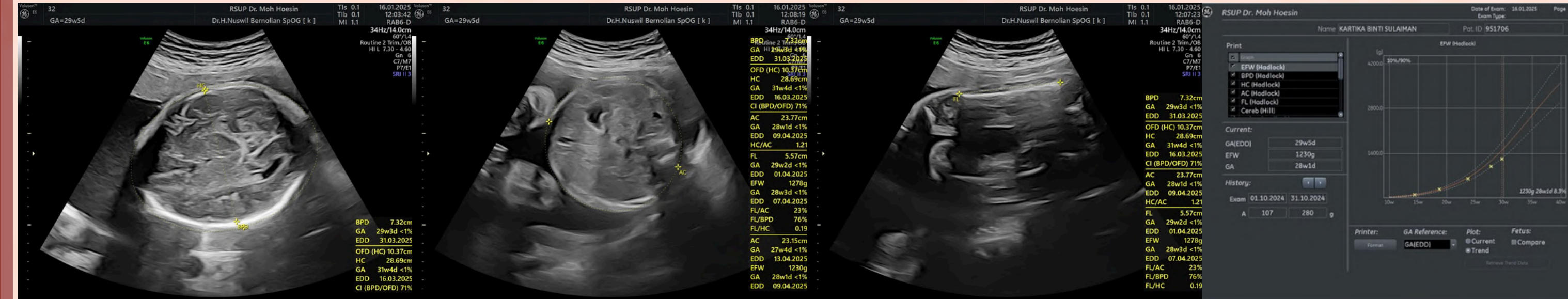


Figure 2. Ultrasonography at 29 weeks

Conference with cardiology, anesthesiology, and neonatology was held to plan **elective cesarean section at 32 weeks**. Unfortunately the fetus's doppler evaluation showed unfavorable result

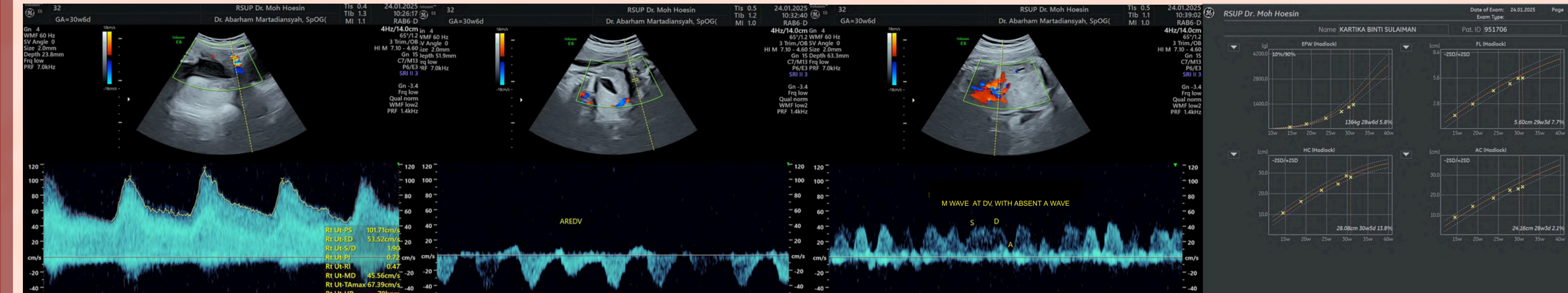


Figure 3. Doppler Ultrasonography at 31 weeks

Cesarean section and tuba ligation performed at week 31 with lung maturation shot was given beforehand. A male infant of 1340 g, APGAR score 5/6 was born. The mother was monitored in cardiovascular intensive care unit (CVICU) for 5 days and discharged without significant complaint. The baby was monitored in NICU due to grade II HMD for 1 month and discharged.

DISCUSSION

ES considered contraindication for pregnancy with high maternal mortality rate 30-50%. Hemodynamic changes in pregnancy might worsening a left-right shunt, leading to severe PAH.

In this case, patient has done regular check up with cardiologist and was advised to avoid pregnancy. After married, the patient was pregnant and did the first check up at 15 weeks of gestation. Patient chose to continue her pregnancy despite the high risk for mother and baby. Multidisciplinary team was assembled and intensive monitoring for both mother and baby performed monthly. The best mode of delivery was still uncertain but elective cesarean section at week 28-32 was preferred following the recommendation of the 2018 European Society of Cardiology guidelines. We planned to performed elective cesarean section at week 32.

Unfavorable fetal doppler was found in week 31, cesarean section was performed afterwards. Postpartum management must be managed thoroughly with maximum mortality rate occurs during this period. The patient was monitored in CVICU to anticipate hemodynamic change after delivery.

CONCLUSION

Pregnancy in women with ES complicated by severe PAH requires meticulous planning and monitoring. The time and mode of delivery should consider carefully with intensive postpartum monitoring.

Keywords : Eisenmenger syndrome, pulmonary hypertension, pregnancy

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