eISSN : 2579-8324 pISSN : 2579-8323

ANDALAS OBSTETRICS AND GYNECOLOGY JOURNAL

Address for Correspondence:
Editorial Room Andalas Obstetrics and Gynecology Journal, 3rd floor of KSM of Obstetrics and Gynecology, RSUP DR. M. Djamil Padang, Jl. Perintis Kemerdekaan Padang, Sumatera Barat 25127

Website:
http://jurnalobgin.fk.unand.ac.id/index.php/JOE

RESEARCH Article

Early Congenital Syphilis: The Impact of Bad Antenatal Care

Hidayatullah A.1, Zulmaeta2

1. Resident of Departement Obstetry and Gynecology, Faculty of Medicine, Universitas Riau

2. Departement Obstetry and Gynecology, Faculty of Medicine, Universitas Riau/ Arifin Achmad General Hospital

Corespondence: *Hidayatullah A., email : hidayatullaha@gmail.com*

Abstract

Syphilis is a systemic infectious disease caused by Troponema palidum. Syphilis is generally transmitted through sexual contact, but can also be transmitted vertically during pregnancy. Until now syphilis has become a world wide problem for pregnant women, WHO recommends syphilis tested by triple elimination (syphilis, hepatitis B, and HIV) during antenatal care for better pregnancy outcomes.

21 year old female, diagnosed with primipara 32-33 weeks of gestational age active phase of labor, latent syphilis + intrauterine single live fetus with head presentation. The patient had never checked her pregnancy until the current gestational age, and only found out that she had syphilis accompanied by clinical symptoms. Birth of a baby with suspected congenital syphilis.

Keywords: *congenital syphilis, antenatal care*

eISSN : 2579-8324 pISSN : 2579-8323

ANDALAS OBSTETRICS AND GYNECOLOGY JOURNAL
Address for Correspondence:
Editorial Room Andalas Obstetrics and Gynecology Journal, 3rd floor of KSM of Obstetrics and Gynecology, RSUP DR. M. Djamil Padang, Jl. Perintis Kemerdekaan Padang, Sumatera Barat 25127
Website:
http://jurnalobgin.fk.unand.ac.id/index.php/JOE

INTRODUCTION

Syphilis is a systemic infectious disease caused by the bacterium Troponema palidum which can affect all organs of the body, from the skin, mucosa, heart, to the central nervous system. Syphilis can give clinical symptoms or be asymptomatic.1 Who reported the prevalence of syphilis until 2012, there was an increase in syphilis cases up to 5.6 million cases and is expected to increase to 18 million cases. Transmission of syphilis from mother to child (congenital syphilis) is usually transmitted to the fetus if the mother's infection is not detected and treated properly early in pregnancy.2 The CDC estimates a 40% incidence of early congenital syphilis in women infected with syphilis without specific symptoms. The prevalence of early congenital syphilis has increased from year to year so that by 2020 there have been 2,000 cases of early congenital syphilis.3 Higher rates of congenital syphilis related to inadequate prenatal care, substance use during pregnancy, African American race, and lack of screening and treatment.4

Early congenital syphilis in infants will be found with jaundice with petechiae or purpuric skin lesions, until there is desquamation of the skin, lymphadenopathy, rhinitis, pneumonia, myocarditis, nephritis, glaucoma, cataracts, anemia and thrombocytopenia, and long bone involvement.[3,4]

CASE REPORT

A 21 year old woman, came with complaints in labor. The patient was not complained of fever, vaginal discharge, rash on the body. The patient claimed to be 8 months pregnant. The patient never went to any health facility during this pregnancy. History of drug use during pregnancy was denied. The patient underwent a physical examination and was within normal limits. Laboratory tests were carried out, and a reactive VDRL (veneral disease research laboratory) was found. On ultrasound examination, a single live intrauterine fetus was found, fetal movement (+), fetal heart rate (+), with biometry: BPD 7.9cm ~ 31 weeks 6 days; HC 28.92cm ~ 31 weeks 6 days; AC 31.31cm ~ 35 weeks 1 day; FL 6.13cm ~ 31 weeks 6 days, EFW 2065g. In patients diagnosed with primipara 32-33 weeks of gestational age, active phase I in labor, latent syphilis with intrauterine single live fetus with head presentation. After observatin of the progress of labor, a live female baby was born with a baby weight of 1900g, A/S 4/5. There was skin desquamation, intra-abdominal organomegaly, suspected hepatomegaly. The baby was suspected with early congenital syphilis based clinical manifestation. The baby was admitted to the NICU and died less than 24 hours after being born.

ANDALAS OBSTETRICS AND GYNECOLOGY JOURNAL
Address for Correspondence:
Editorial Room Andalas Obstetrics and Gynecology Journal, 3rd floor of KSM of Obstetrics and Gynecology, RSUP DR. M. Djamil Padang, Jl. Perintis Kemerdekaan Padang, Sumatera Barat 25127
eISSN : 2579-8324 pISSN : 2579-8323
Website:
http://jurnalobgin.fk.unand.ac.id/index.php/JOE

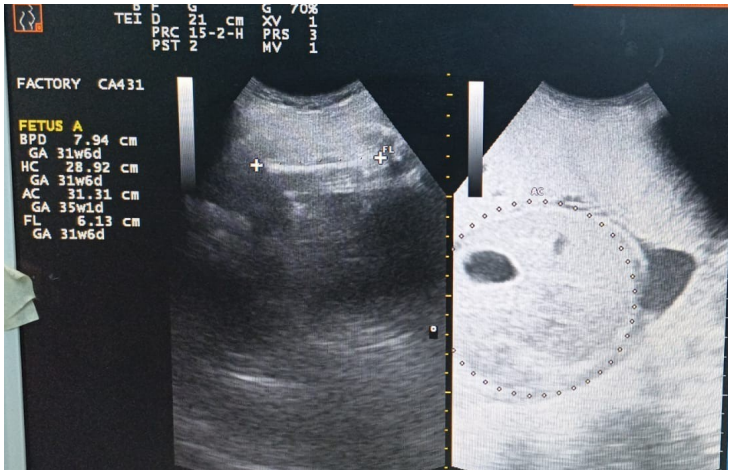

Figure 1. ultrasound suggested of intraabdomen organomegaly of fetus

Figure 2. new born with sugested early congenital anomaly

DISCUSSION

Syphilis is a sexually transmitted disease caused by the spirochete Treponema pallidum. This is of particular concern during pregnancy as it can lead to adverse pregnancy outcomes and congenital syphilis.5 If a pregnant woman has syphilis, mother- to-child transmission can occur, potentially causing serious adverse outcome including low birth weight, stillbirth and congenital syphilis.6 Most untreated primary and secondary syphilis infections in pregnancy result in severe adverse pregnancy outcomes.2

Based on the clinical symptoms of syphilis, it is divided into primary, secondary, latent and tertiary syphilis.[1,4] Latent (asymptomatic) syphilis infections in pregnancy also cause serious

ANDALAS OBSTETRICS AND GYNECOLOGY JOURNAL
eISSN : 2579-8324 pISSN : 2579-8323
Address for Correspondence:
Editorial Room Andalas Obstetrics and Gynecology Journal, 3rd floor of KSM of Obstetrics and Gynecology, RSUP DR. M. Djamil Padang, Jl. Perintis Kemerdekaan Padang, Sumatera Barat 25127
Website:
http://jurnalobgin.fk.unand.ac.id/index.php/JOE

adverse pregnancy outcomes in more than half of cases. The fetus can be easily cured with treatment, and the risk of adverse outcomes to the fetus is minimal if the mother receives adequate treatment during early pregnancy ideally before the second trimester.[2] Diagnosis of syphilis can be made by finding T. pallidum in blood specimens using a microscope, rapid plasma reagent (RPR), veneral disease research laboratory (VDRL) and confirmed by Treponema pallidum haemaglutination assay (TPHA).[1] In this case report, positive VDRL examination results were found without any complaints from the mother. Describes the mother had latent syphilis.

Maternal infection can lead to premature delivery, spontaneous abortion, stillbirth, nonimmune hydrops, perinatal death, and two characteristic syndromes of clinical disease, early and late congenital syphilis.[4,7] Because of its immune incompetence prior to mid-pregnancy, the fetus is less likely to manifest the immunological infammatory response characteristic of congenital infection before this time.When vertical transmission occurs, severe congenital syphilis progresses along a continuum. Hepatic abnormalities are followed by anemia, thrombocytopenia, and then ascites and hydrops. Stillbirth remains a major complication. The newborn may have jaundice with petechiae or purpuric skin lesions, lymphadenopathy, rhinitis, pneumonia, myocarditis, nephrosis, or long-bone involvement.[3,4] In cases, we found a birth premature baby with skin desquamation, intra-abdominal organomegaly suspected of originating from the liver. Baby was early neonatal death.

Congenital syphilis remains a major public health problem worldwide, and its incidence is increasing in the United States. Every case of congenital syphilis must be seen as a failure of our public health system to provide optimal prenatal care to pregnant women, as congenital syphilis can be prevented by early and repeated prenatal serologic screening of mothers.[7] Congenital syphilis can be divided into 2 categories, early congenital syphilis (onset before 2 years), and late congenital syphilis (onset > 2 years). WHO recommends a triple elimination examination in early pregnancy. It is hoped that finding a mother with syphilis early will have a good effect on the baby. [2] In early pregnancy, the mother can be given immediate treatment by being given benzathine penicillin 2.4 million units as a treatment for latent syphilis and prevention of infection in the fetus. 1,4, In patients with penicillin allergy, there is limited evidence on using other non-penicillin alternative such as ceftriaxone, azithromycin or erythromycin.[9] Untreated women have about a 70% chance of fetal infection during the first 4 years of disease.[5] Serologic screening of all pregnant women during the early stages of pregnancy is recommended. And it should be repeated at 28 to 32 weeks' gestation and at delivery.[8] In this case, the patient never had any antenatal care during this pregnancy, so the patient never received a triple elimination screening examination. If the patient carries out antenatal care regularly, he will get the right treatment so that better birth outcomes are expected

eISSN : 2579-8324 pISSN : 2579-8323

ANDALAS OBSTETRICS AND GYNECOLOGY JOURNAL
Address for Correspondence:
Editorial Room Andalas Obstetrics and Gynecology Journal, 3rd floor of KSM of Obstetrics and Gynecology, RSUP DR. M. Djamil Padang, Jl. Perintis Kemerdekaan Padang, Sumatera Barat 25127
Website:
http://jurnalobgin.fk.unand.ac.id/index.php/JOE

CONCLUSION

Syphilis is a disease that is still the world's focus on pregnant women, WHO recommends triple elimination examinations in pregnant women early in pregnancy as a prevention of poor pregnancy outcomes. Early diagnosed congenital syphilis should be treated immediately so that vertical transmission to the mother and fetus can be prevented.

REFERENCES

ADDIN ZOTERO_BIBL {"uncited":[],"omitted":[],"custom":[]} CSL_BIBLIOGRAPHY

1. Prawirohardjo, Sarwono. (2016). Ilmu Kebidanan. 4th edition. Jakarta: PT Bina Pustaka Sarwono Prawirohardjo.

2. World Health Organization. (2017). *WHO 2017 Syphilis in Pregnancy Guidelines*.

3. CDC, (2020). Quick Reference Handbook of Selected Congenital Anomalies and Infections. Available: https://www.cdc.gov/ncbddd/birthdefects/surveillancemanual/photo-atlas/objectives_pa.html#print

4. Cunningham F.G, (2022). Williams Obstetrics 26e 26th Edition, Kindle Edition. McGraw Hill

5. Kurniawati, E. M., Rahmatyah, R., Lie, V., & Rheza, A. (2022). Pregnancy with Early Latent Syphilis, a reality in 21st century: a case report and literature review. *Medical and Health Science Journal*, *6*(1), 41–46. https://doi.org/10.33086/mhsj.v6i1.2412

6. Public Health England. (2017). *NHS Infectious Diseases in Pregnancy Screening Programme Handbook 2016 to 2017*. *April 2016*, 1–46.

7. Cooper, J. M., & Sánchez, P. J. (2018). Seminars in Perinatology Congenital syphilis. *Seminars in Perinatology*, *42*(3), 176–184. https://doi.org/10.1053/j.semperi.2018.02.005

8. Creasy, R.K, et all, (2014) Creasy And Resnik's Maternal-Fetal Medicine, Seventh Edition. Philadelphia: Elsevier Saunders. 2014

9. Uku, A., Albujasim, Z., Dwivedi, T., Ladipo, Z., & Konje, J. C. (2021). Syphilis in pregnancy: The impact of "the Great Imitator." *European Journal of Obstetrics and Gynecology and Reproductive Biology*, *259*, 207–210. https://doi.org/10.1016/j.ejogrb.2021.01.010