Jurnal Kesehatan Dan Ilmu Kedokteran (JUKIK)
Vol 06, No 2 Mei 2024
https://journalversa.com/s/index.php/jukik

CONGENITAL SYPHILIS IN INFANT : CASE REPORT

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ABSTRAK

Sifilis kongenital (CS) terjadi ketika subspesies Treponema Pallidum, seperti pallidum, menginfeksi janin seorang wanita yang sebelumnya telah terinfeksi sifilis baik pada fase primer maupun sekunder. Sifilis kongenital ditularkan dari wanita hamil yang terinfeksi ke dalam konsepsi. oleh bakteri Treponema pallidum melalui plasenta atau melalui kontak bayi dengan lesi aktif di jalan lahir. Kemungkinan penularan tertinggi terjadi ketika ibu hamil berada pada tahap infeksi primer dan sekunder1. Sifilis yang tidak diobati pada wanita hamil dapat menyebabkan (40% kasus) keguguran, kematian janin, kematian neonatal, dan, ketika anak-anak bertahan hidup, sekitar 20% menunjukkan gejala dan muncul pada tahap awal (di bawah dua tahun) dan akhir (di atas dua tahun). Entitas CS adalah penyakit sifilis yang diderita bayi dengan manifestasi klinis yang mendukung diagnosis CS atau ditemukannya Treponema pallidum pada lesi, plasenta, tali pusat atau otopsi jaringan. Gejala dan manifestasi klinis penyakit ini mungkin baru terlihat setelah beberapa tahun. minggu atau bulan setelah kelahiran dan, dalam beberapa kasus, mungkin membutuhkan waktu bertahun-tahun untuk muncul. Peningkatan kejadian kasus sifilis pada wanita terutama terjadi pada usia subur, sehingga meningkatkan risiko penularan Treponema pallidum selama kehamilan, yang mengakibatkan pada kasus sifilis kongenital semakin banyak dan angka kematian neonatus akibat sifilis kongenital semakin besar. Pada kasus ini, seorang bayi perempuan berusia lima bulan datang dengan keluhan papul dan plak eritematosa dengan sisik pada bagian belakang kepala (daerah oksipital). , telapak tangan, kedua kaki, dan pasien tampak asupannya kurang, keluhan sudah timbul sejak 1 bulan sebelumnya. Pada pemeriksaan penunjang diperoleh hasil VDRL/TPHA reaktif. Namun, tidak ada riwayat penyakit sebelumnya dari ibu pasien.

ABSTRACT

Congenital syphilis (CS) occurs when a subspecies of Treponema Pallidum, such as pallidum, infects the fetus of a woman who has previously been infected by syphilis either in the primary or secondary phase.Congenital syphilis is transmitted from the infected pregnant woman to the conceptus by the bacterium Treponema pallidum via placenta or through the infant's contact with active lesions in the birth canal. The highest probability of transmission occurs when pregnant women are in the primary and secondary stages of the infection1. Untreated syphilis in pregnant women can cause (40% of cases) miscarriage, fetal death, neonatal death, and, when children survive, about 20% are symptomatic and present early (under two years) and late (over two years) manifestations. Entity of CS is a syphilis disease suffered by infants with the clinical manifestations supporting the diagnosis of CS or the discovery of Treponema pallidum in lesions, placenta, umbilical cord or tissue autopsy.The symptoms and clinical manifestation of this disease may not

become apparent until several weeks or months after birth and, in some cases, may take years to appear.The increase in the incidence of syphilis cases among women occurred mainly in those of reproductive age, leading to an increased risk of transmission of Treponema pallidum during pregnancy, which results in a greater number of cases of congenital syphilis and a greater number of neonatal deaths due to congenital syphilis.In this case, a five monthold baby girl presented with complaints of papules and plaques erythematous with scales on the back of the head (occipital region), the palms, both feet, and the patient appeared to have inadequate intake, complaints that had arisen since 1 month before. In the supporting examination reactive VDRL/TPHA results were obtained. However, there was no history of previous illness from the patient's mother.

INTRODUCTION

Baby girl E.P 5 month old was brought to the emergency unit, with sign and symptoms of papules, erythema plaques scaly on the back of the head, both hands and soles of the patient's feet since 1 month accompanied by fever and inadequate intake. The patient is an adopted baby who was adopted at the age of 1 month according to information from the adoptive parents. The patient was born normally with sufficient gestational age, born at home assisted by the family.

The baby's birth weight was 2700 grams, body length 51 cm. Background of the biological parents, the father is 18 years old and the mother is 16 years old and is not yet legally married. During her pregnancy, the patient's mother never had her pregnancy checked.

According to information, the patient appeared weak since 2 days of less intake, fever (+), and papules, grayish white plaque, cough and runny nose (-), loose stools (-), complete immunization history.

On physical examination, the patient was found to be in composmentis consciousness, respiration rate 24 x/minute, pulse 124 x/minute, temperature 36.7, weight: 6.7 kg

Immunoserological laboratory examination was found:

- . VDRL/RPR : Reactive 1/512
- TPHA : Reactive 1/5120
- Hemoglobin : 8.8 g/dl
- Leukosit : 16.310
- Basofil : 0,1%
- Eosinofil : 3,7 %
- Neutrofil : 29,6 %

- Limfosit : 58,2%
- Monosit : 8,4%

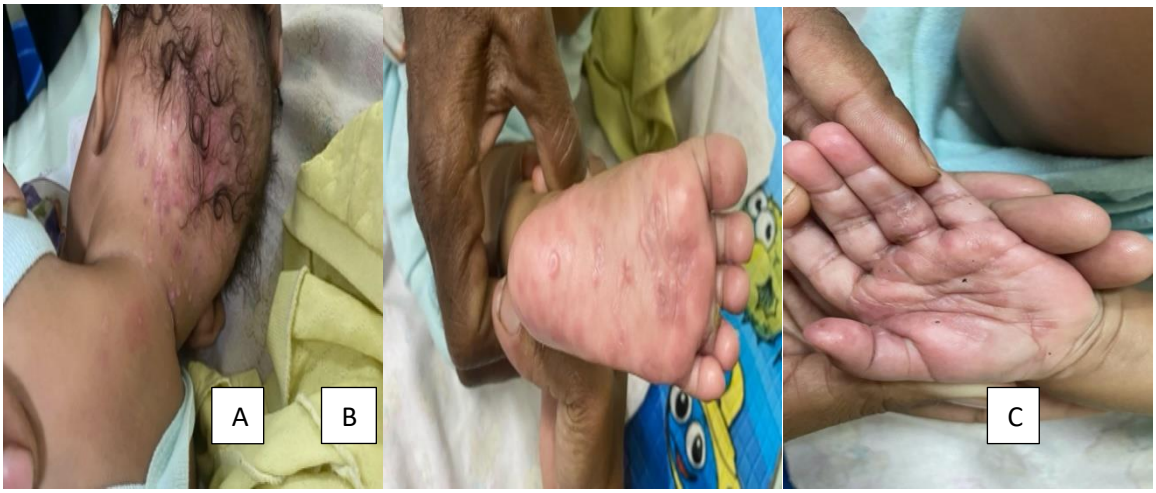

Figure A : Erythema macules, papules, plaques appear in the occipital region

Figure B : Erythema macules, papules, plaques appear in the plantar pedis region

Figure C : Erythema macules, papules, plaques appear in the plantar region of the manus

These patients are treated by:

- Injection of Penicillin G Procaine 1 x 335.000 IU (intramuscular) for 10 days, followed by injection of Benzathine Penicillin in 50.000 IU/kg (day 11) single dose
- Injection Paracetamol 70mg/6hr
- Plan :

Pro rö long bones to see if there are manifestations of syphilis in the bones.

Pro eye consul to see ocular manifestations of syphilis

Check HIV status

RESULT AND DISCUSSION

- In this patient, there was no history of screening since pregnancy, so there was no data that could support the patient's clinical course. The patient came to the health service after

symptoms appeared on the baby's skin and laboratory and serological examinations were carried out and found a reactive syphilis titer. *Treponema pallidum* bacteria can cross the placenta from 10-12 weeks of gestation, causing the risk of fetal infection to increase with gestational age. Syphilis infection can occur transplacentally during pregnancy or at birth through contact of the newborn with genital lesions. Lactation cannot cause transmission of infection unless there is a lesion in the breast. It is currently believed that the transmission of syphilis from pregnant women to the fetus can occur until the fetus has an adequate immune response, namely in the first trimester, with the risk of fetal infection increasing with gestational age.

The poor adherence to follow-up could be minimized if health professionals, both at the hospital discharge time and at the child's first appointment, were careful to advise mothers about the importance of follow up, reinforcing attendance at subsequent appointments, especially in the CS case, in which most children are born without symptoms.

- The clinical manifestations obtained in this patient were erythema macules, papules, plaques in the occipital region, plantar manus dextra et sinistra, plantar pedis dextra et sinistra. Syphilis congenital is classified as an early or late disease, early disease (ranging from birth to two years) commonly manifests within the first three months of life. Clinical manifestations of early infection include stillbirth (up to 40% of untreated pregnancies), hydrops fetalis, preterm birth, central nervous system infection (manifesting as meningitis, uveitis, optic atrophy, seizures, and hearing loss), hepatosplenomegaly, hyperbilirubinemia, cholestasis, hemolytic anemia, thrombocytopenia, snuffles (nasal congestion and excessive nasal discharge), generalized lymphadenopathy, pneumonia, osteochondritis or periostitis, pseudo paralysis of Parrot (inability to move an extremity due to painful periostitis), mucocutaneous lesions or maculopapular rash, and desquamation involving the palms and soles.

  The majority, up to 70%, of infected neonates are asymptomatic, placing them at risk of missed or delayed diagnosis and inadequate treatment. If untreated, asymptomatic infected infants can develop late (> two years) clinical manifestations, including the classic triad of CS: interstitial keratitis, sensorineural hearing loss, and notched central incisors (Hutchinson teeth). Other late signs of CS include developmental delay, anterior bowing (saber) shins,

painless knee swelling (Clutton joints), frontal bossing, mulberry molars (multiple rounded rudimentary enamel cusps affecting the permanent first molars), and saddle nose (collapsed nose bridge).

The CS occurs when syphilis in pregnancy is untreated, treated but delayed (<4 weeks before delivery), or inadequately treated (incomplete according to the prescribed dose regimen or treated with medication other than penicillin). It can cause the death of 6.5% of the total cases, and the remaining 80% of patients can still be saved, where premature birth and low birth weight significantly affect the mortality of neonates born from CS cases.

- There is no information obtained regarding the results of previous VDRL and TPHA from the patient's mother. However, in this patient when symptoms were discovered laboratory and serological examinations were carried out and the results were VDRL and TPHA reactive. The patient was then given Penicillin G Procaine 1 x 335.000 IU (intramuscular) for 10 days for one time with no allergic reaction to the injection of this antibiotic, followed by injection Benzathine Penicillin 50.000 IU/kg (day 11) single dose, injection Paracetamol 70mg/6jam.

  All children exposed to CS during pregnancy, even with properly treated mothers, should receive follow up with monthly outpatient appointments until the 6th month of life and bimonthly from the 6th to the 18th month. Its control is performed by the venereal disease research laboratory (VDRL) examination in children, at 1, 3, 6, 12 and 18 months of age, and it can be interrupted after two consecutive negative tests. Semi-annual ophthalmic, neurological and audiological assessment is also required for two years. In children whose cerebrospinal fluid (CSF) at birth has shown abnormal results, CSF analysis should be repeated every six months until normalization of biochemical (protein), cytological and immunological parameters (VDRL titration).

CONCLUSION

We have described a case of congenital syphilis in a female infant patient. The VDRL and TPHA results showed an increase in values of 1/512 VDRL titer and 1/5120 reactive TPHA titer.

The patient was also treated using Penicillin G Procaine for 10 days and Penicillin G Benzathine on day 11. After some time, the patient's condition improved during therapy and underwent outpatient therapy. Mothers should be screened throughout their pregnancy to prevent untreated syphilis and its complications in the baby. The lack of follow-up for congenital syphilis is greatly influenced by the mother's awareness that during pregnancy she must carry out complete screening tests, and take her child to medical attention before symptoms appear. Most children with congenital syphilis present to primary care units after the onset of symptoms, therefore there is a need for improved adequate care and stronger advice regarding the mother's responsibility for her baby's health.

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