

Uncomplicated pregnancy with asymptomatic covid-19 and hepatitis b: first case report in Libya

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Abstract

The Novel Coronavirus called Severe acute respiratory syndrome corona virus 2 (SARS-CoV-2) infection which responsible for COVID 19 pandemic attribute to worldwide challenge to raising effort to overcome risks in all health service units including maternity unit [1]. In Libya we reported a first case report of pregnant woman with asymptomatic confirmed COVID 19 by nasopharyngeal swabs for SARS-CoV-2 RNA PCR and Hepatitis B infection discovered accidentally during hospitalization, supportive management and protective measures carried out throughout hospitalization to early detection of possible complications. The mother requested to delivery by an elective cesarean section under ordinary spinal anesthesia without significant complications occur, it was performed in negative pressure operating room connected to NQ 500 air purification system accompanied by strict effective protective measures to prevent spread of both viral infection to her newborn and medical staff, the newborn remained negative for SARS- CoV-2 infection till discharged.

Keywords: Coronavirus, Sars-Cov-2 Infection, Asymptomatic Covid-19, Hepatitis B Virus Infection, Pandemic, Pregnancy, Cesarean Section, Libya.

1. Introduction

The Novel Coronavirus called Severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) infection which responsible for COVID 19 pandemic attribute to worldwide challenge to raising effort to overcome risks in all health service units including maternity unit [1]. As other Coronavirus species had found associated with adverse outcomes in pregnancy, this increasing suspicion about real effect of COVID 19 in pregnant woman [2]. According to the last guidelines of the royal college of obstetricians and gynecologists there are limited data available favorable and recommend mode of delivery over another and limited evidence available suggested intrauterine vertical transmission of SARS-CoV-2 infection [3, 4].

2. Methods and patient

On 31 May 2020, Tripoli, Libya, A 30 year-old pregnant woman at 36 weeks and 4 days gestation was Gravida 5, Para 4 and previous one intrauterine fetal death at term on last delivery, transferred from Sabha (A city in south Libya) to Tripoli (Capital

city of Libya) for obstetrics and gynecological advice and follow up at Tripoli University Hospital. While undergo screening test by nasopharyngeal swabs for SARS-CoV-2 RNA PCR (Polymerase Chain Reaction) she was tested positive result without obvious symptoms or signs. The case segregated and referred to Isolation Health Tripoli Center (Metiga Isolation Hospital) for further workup and care. On 1st June, a day 1 of hospitalization, she was asymptomatic, her medical history positive for allergic rhinitis and skin rash. Her vital signs revealed normal values results: Temperature was 36.7 C°, Blood Pressure 120/80 mmHg, Respiratory Rate 12 breath/minute, Heart Rate 84 beat/minute, Physical examination demonstrated no obvious signs of COVID 19 detected with clear chest on auscultation.

Laboratory investigations results included: Complete Blood Count showed: her hemoglobin concentration was 11.5 g/dl (reference range: 12.3 -16.7 g/dl), platelets 172 10⁹/mm³, white blood cells count 4.6 10⁹/mm³ lymphocytes 1.3 10⁹/mm³. Viral screen tested accidentally positive for Hepatitis B virus infection,

lactate dehydrogenase was 767 U/L (reference range: 240 – 480 U/L). Liver function tests, serum creatinine, urea and electrolytes were within normal ranges. C-reactive protein concentration found within normal range was 0.58 mg/L (reference range: less than 5 mg/L), PT 13.6 seconds (reference range: 11-24 seconds), INR 1.18 (reference range: 1.0- 1.1), D Dimer 1.93 (reference range: less than 0.50).

The patient had started fraxiparine 0.3 ml from the day one then the dose raised to 0.6 ml during the next 2 days, also vitamin C and zinc supplements only were received. On 4th June, the patient was complained sudden lower abdominal pain and cramps and her Temperature was 39 C°, blood pressure 95/60 mmHg, abdominal ultrasound performed without abnormality detected, cardiocography results showed premature uterine contraction without fetal compromise, urine analysis results revealed WBCs (pus cells) was 30 -35 HPF, RBCs 18 -20 HPF, Epithelial cells 2+, bacteria 2+, Protein trace, PH 7.0 and specific gravity 1.015, this suggested urinary tract infection treated by ceftriaxone 1g IV, IV fluid 2L/24 hr and single dose of dexamethasone 12 mg were received. Also serum magnesium level performed and the result showed 0.5 mEq/L (reference range 1.3 -2.1 mEq/L) treated by Magnesium sulphate 3 mg × 3/4 hours in drip. Next 3 days her general health conditions improved except for white vaginal discharge detected by vaginal examination and treated by daktarin vaginal cream and urriage Gyne 8 douches 1× 2 for 10 days, the blood pressure maintained at normal level and serum magnesium level raised from 0.5 to 0.76 mEq/L which decided to switch into oral route magnesium supplements 1 × 2, also KCL tablets 1 × 2 settled in management because serum potassium level became lowered to 3.1 mEq/L (reference range: 3.5 – 5.0 mEq/L). Throughout hospitalization the patient was asymptomatic for COVID 19 and ultrasound finding was normal.

On 15th June at 3:30 AM, the mother established a labor pain with Bishop Score zero of cervix and requested for elective cesarean section despite previously delivered vaginally. Preoperative monitoring established revealed temperature was 36.4 C°, blood pressure 115/75 mmHg and, heart rate 90 beat/minute, oxygen saturation 98% on room air and continues cardiocography monitoring was normal. Standard protective measures undertaken included: Personal Protective Equipment (PPE), disposable surgical gloves and shoe covers, surgical mask, medical standard mask (N 95), goggles, surgical caps with strict antiseptic techniques[5]. At 8:44 AM of the same day, an elective cesarean section under ordinary spinal anesthesia performed successfully without significant complications in negative pressure operating room connected to NQ 500 air purification system with strict precautions undertaken to prevent spread of both SARS-CoV-2 and Hepatitis B virus infection to the newborn and medical staff.

Postoperatively, A healthy male newborn delivered with APGAR score of 10 within 1 and 5 minutes, his body weight 3.500 kg and the newborn immediately isolated from operating room and serial samples picked up from throat, umbilical cord and stool were tested negative for SARS-CoV-2 infection, he was received Vitamin K 1 mg IM and hepatitis B Immunoglobulin 200 IU and during the next day he received his vaccination according to national Libyan program. After delivery, the mother became febrile temperature was 38.5 C° and expressed raised CRP result

was 139 and D Dimer 1.32, an antibiotics (cefditoren pivoxil 200 mg, azithromycin 500 mg, metronidazole 500 mg tablets) started beside analgesics, IV fluid and fraxiparine 0.6 ml dose for 3 days then reduced to 0.3 ml dose.

On 21st June, the patient became constantly improved clinically and repeated nasopharyngeal swabs for SARS-CoV-2 RNA PCR on 2 occasions, 24 hours apart, demonstrated negative results for COVID 19 which encouraged the mother to achieve breast feeding her newborn which was refused it, Also the newborn performed nasopharyngeal swabs and remained negative results for SARS-CoV-2 infection. And decided to discharge the mother and her newborn with residual recommended supportive management and further follow up considered for care.

Comments

Although, the pregnancy is consider as a high risk process but still limited data available about real effect of COVID 19 in pregnancy, in our case demonstrated how appropriate care established for asymptomatic pregnant woman with COVID 19 to prevent possible complications and treat it promptly if occur. Also, a Hepatitis B infection discovered accidentally during hospitalization of our patient, regarding these events strict protective measures undertaken to prevent spread of both viral infections to newborn and medical staff.

Conflict of Interest

The authors declare that they have no conflict of interest regarding the publication of this case report.

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Patient Consent

Obtained

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