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IRON DEFICIENCY IS A CONDITION THAT OCCURS WHEN THERE IS A LACK OF IRON IN THE BODY. PREGNANCY-RELATED ANAEMIA

Nursing

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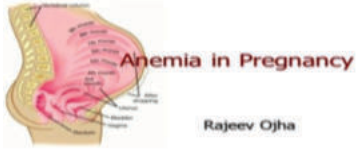
ABSTRACT

Introduction:- The most prevalent medical issue associated with pregnancy. In developed countries, 18-20% of pregnant women are anaemic, whereas in developing countries, 40-75 percent are. It is to blame for the high maternal and foetal mortality rates around the world. Anemia is a condition in which an individual's red blood cell count or oxygen carrying capacity is insufficient to meet his or her physiological requirements, which might vary based on age, gender, attitude, smoking, and pregnancy status (WHO 2013). Anemia caused during pregnancy During pregnancy, anaemia is defined as a haemoglobin (Hb) concentration of less than 11 g/dl. **Present Complaints and Investigation:-** A 22-year-old pregnant woman with a 28-week pregnancy was admitted to Avbrh Hospital Sawangi Meghe with symptoms of weakness, weariness, giddiness, dyspnea, expressive cyanosis, tachycardia, and epigastric discomfort. each at the time of entrance Anemia was defined as haemoglobin less than 10 mg/dl, as determined by laboratory tests. During the physical examination, The mucosal membranes and skin were both pallid. The patient was treated for anaemia from week 28 of pregnancy, according to all specified results. In the Department of Obstetrics and Gynecology, with 28 weeks' gestation and complaints of dyspnea, expressed cyanosis, tachycardia, and epigastric discomfort, the hemograme was less than 10mg/dl, which was termed anaemic, and the blood pressure was increased by 130/80mmHg. **Past History:** According to patients and family who provided past medical and surgical histories, the patient was healthy before to pregnancy, she had no history of hypertension, diabetes, or tuberculosis, and her haemoglobin level was only 11 mg/dl, thus no outcomes were reported. [4]MainSymptomsandthesignificantfinding:- Patient was awake and alert on general examination, however her blood pressure had risen to 130/90 mmHg on physical examination. A physical examination may involve a systolic blood pressure reading. Blood pressure was over 160 mm Hg, and diastolic pressure was over 100 mm Hg. The blood pressure was 96mmHg, the pulse was 100 beats per minute and above, and the foetal heart sound was 120 beats per minute. The clinician must do a complete assessment as well as a full history gathering that includes the symptoms of severe anaemia and a physical examination. The lecturer took vital signs and recorded that the blood pressure was 130/90mmHg, the pulse was 80 beats per minute, the spo2 was 97, and the foetal heart sound was 130 beats per minute, NST was also normal, and the abdominal palpation was done at 28 weeks' gestational. The primary diagnosis, therapeutic intervention, and outcomes:Following a physical examination and research, a history is taken and a physical examination and complete blood test done Despite all of the care, the patient progressed to the active side, and her blood tests were repeated and found to be normal. Her other tests were also normal, and according to the patient's feedback, dysnea, dizziness, weakness, and chest pain were reduced, and the patient's overall condition was better than when she was admitted. When the patient returned to the Gyn OPD for a follow-up on the 20th day, she stated that she had no problems standing or walking, and she was Despite all of the care, the patient is doing well. **Conclusions:** At 28 weeks of pregnancy, a patient with dyspnoea presented to our clinical institution with cyanosis, tachycardia, and epigastric discomfort of weakness, fatigue, and gidiness. As a result of her acute anaemia, she had a lot of problems. The level of haemoglobin was determined using Sahli's acid hematin method of haemoglobin determination (10). According to the World Health Organization, anaemia is defined as a haemoglobin level of less than 11 g/dL during pregnancy (WHO). The same criteria were used to diagnose anaemia during pregnancy (11). Despite prompt diagnosis and good treatment, the patient was given iron by IV, an alternate day drip was continued, and iv intralipid wsa was administered for amniotic fluid augmentation. is connected to serious short- and long-term maternal difficulties. There are defined methods for early detection and management of later difficulties in these situations.

KEYWORDS

Anemia, pregnancy, knowledge, and sociodemographics are some of the terms used in this study.

INTRODUCTION:



The nutritional state of the expectant mother, as well as the newborn's birth weight, is the most critical factor of pregnancy outcomes. (1) Women with no schooling, women from scheduled tribes, and women in the two lowest wealth quantiles are all at risk of anaemia (2). Anemia is a sign of poor nutrition as well as bad health. Iron deficiency anaemia (IDA) is the most severe form of iron deficiency, and because haemoglobin concentration is relatively straightforward to measure, anaemia prevalence is frequently used as a proxy for IDA. Food-based measures such as food fortification and dietary diversification are key long-term strategies for preventing iron deficiency and IDA in the general population.

IDA - because haemoglobin concentration is relatively straightforward to measure, anaemia prevalence is frequently employed as a proxy for IDA. Food-based solutions for increasing iron intake through food fortification and dietary variety are essential long-term strategies for preventing iron insufficiency and improving iron absorption. For a better maternal and perinatal result, anaemia in pregnancy must be addressed at all levels of health care. [1]

Patient Information:

A 22-year-old pregnant woman with a 28-week pregnancy was admitted to Avbrh Hospital Sawangi Meghe with symptoms of weakness, weariness, giddiness, dyspnea, expressive cyanosis, tachycardia, and epigastric discomfort. each at the time of entrance Anemia was defined as haemoglobin less than 10 mg/dl, as determined by laboratory tests. During the physical examination, The mucosal membranes and skin were both pallid. The patient was treated for anaemia from week 28 of pregnancy, according to all specified results. Hemograme; laboratory findings

History of current pregnancy

Primary concerns and symptoms of the patient: A 22-year-old pregnant woman with a 28-week pregnancy was admitted to the Avbrh hospital in Sawangi Meghe, with symptoms including weakness, weariness, giddiness, dyspnea, expressed cyanosis, tachycardia, and epigastric discomfort. each at the time of entrance Anemia was defined as haemoglobin less than 10 mg/dl, as determined by laboratory tests. During the physical examination, The mucosal membranes and skin were both pale[2]. Women with anaemia are more likely to have preterm labour, intrauterine growth retardation, low birth weight babies, and children with developmental delays. A 22-year-old pregnant woman was admitted to Avbrh hospital Sawangi Meghe Wardha with complaints of weakness, fatigue, dizziness, dyspnea, shortness of breath, rapid heart beat, tachycardia, and epigastric pain. each at the time of entrance Anemia in pregnancy was defined as haemoglobin less than 10mg/dl, as determined by laboratory tests. During the physical examination, The mucosal membranes and skin were both pallid. A 22-year-old pregnant woman with a 28-week pregnancy was admitted to the Avbrh hospital in Sawangi Meghe, with symptoms including weakness, weariness, giddiness, dyspnea, expressed cyanosis, tachycardia, and epigastric discomfort. each at the time of entrance Anemia was defined as haemoglobin less than 10

mg/dl, as determined by laboratory tests. During the physical examination, The mucosal membranes and skin were both pallid. [3]

Medical, family, and psycho-social history:
According to herself and her entire family, there was no previous medical history such as tuberculosis, asthma, or any previous operation, and no previous psychiatric history. She was a 22-year-old primigravida who lived in a remote area, had completed her formal schooling, and worked as a pastoralist. She was classified as being from a low socioeconomic class, but according to her mother, the patient has a pleasant personality and has excellent interpersonal relationships with her neighbours and other members of society.

Relevant past interventions with outcomes:
According to patients and family who provided past medical and surgical histories, the patient was healthy before to pregnancy, she had no history of hypertension, diabetes, or tuberculosis, and her haemoglobin level was only 11 mg/dl, thus no outcomes were reported. [4]

Clinical findings:
Her physical examination was completed at the time of her admittance. Blood pressure was 130/90mmHg, pulse was 80 beats per minute, spo2 was 97, and foetal heart sound was 130 beats per minute, NST was also normal, abdominal palpation was done by lecturer with 28 weeks' gestation and fundal height was normal according to gestational age, ultra sonography was done as per report and showed Cardiac activity was present, adequate amniotic fluids, no oligohydrominous and polyhydrominous, The foetal weight was normal, and the pregnancy was a single intrauterine pregnancy lasting 28 weeks with no signs of foetal abnormalities. Dyspnoea, expressive cyanosis, tachycardia, and epigastric discomfort were found in a comprehensive blood analysis. The heart rate was 105 beats per minute, and the oxygen saturation was 96 percent. The foetal heart sound was 120 to 130 beats per minute on physical examination. In individuals with anaemia, early detection/diagnosis and effective care are critical for better mother and infant outcomes. . A complete blood count with platelet count, as well as assessments of serum creatinine and liver enzyme levels, urine protein 24-hour collection, and protein/cretinine ratio, may help to establish the diagnosis. An antepartum foetal surveillance urine study (protein 1+) should be performed as part of the prenatal evaluation. Biochemical laboratory tests include the following:

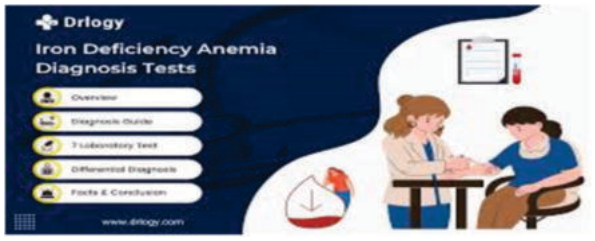
Significant physical examination (PE) and important clinical findings.
Patient was awake and alert on general examination, however her blood pressure had risen to 130/90 mmHg on physical examination. A physical examination may involve a systolic blood pressure reading. Blood pressure was over 160 mm Hg, and diastolic pressure was over 100 mm Hg. The blood pressure was 96mmHg, the pulse was 100 beats per minute and above, and the foetal heart sound was 120 beats per minute. The clinician must do a complete assessment as well as a full history gathering that includes the symptoms of severe anaemia and a physical examination. The lecturer took vital signs and recorded that the blood pressure was 130/90mmHg, the pulse was 80 beats per minute, the spo2 was 97, and the foetal heart sound was 130 beats per minute, NST was also normal, and the abdominal palpation was done at 28 weeks' gestation.

Timeline:
Cardiac activity was present, enough amniotic fluids were present, no oligohydrominous and polyhydrominous were present, and no congenital abnormalities was observed, according to the ultrasound report. The foetal weight was normal, and the pregnancy was a single intrauterine pregnancy lasting 28 weeks with no signs of foetal abnormalities. Dyspnoea, expressive cyanosis, tachycardia, and epigastric discomfort were found in a comprehensive blood analysis. With a heart rate of 105 beats per minute, [6} A complete blood count with platelet count, as well as assessments of serum cretinine and liver enzyme levels, urine protein 24-hour collection, and protein/creatinine ratio, may help to establish the diagnosis.

Historical and current information from this episode of care organized as a timeline
A 22-year-old pregnant woman with a 28-week pregnancy was admitted to the Avbrh hospital in Sawangi Meghe, with symptoms including weakness, weariness, giddiness, dyspnea, expressed cyanosis, tachycardia, and epigastric discomfort. each at the time of entrance Anemia was defined as haemoglobin less than 10 mg/dl, as determined by laboratory tests. During the physical examination, Her skin and mucous membranes were pale, and her blood pressure had risen to 130/90 mmHg on physical examination. A physical examination may involve a systolic blood pressure reading. Blood pressure was over 160 mm Hg, and diastolic pressure was over 100 mm Hg. The blood pressure was 96mmHg, the pulse was 100 beats per minute and above, and the foetal heart sound was 120 beats per minute. The clinician must do a complete assessment as well as a full history gathering that includes the symptoms of severe anaemia and a physical examination. The blood pressure was 130/90mmHg, the pulse was 80 beats per minute, the spo2 was 97, and the foetal heart sound was 130.

The foetal weight was normal, and the pregnancy was a single intrauterine pregnancy lasting 28 weeks with no signs of foetal abnormalities. Dyspnoea, expressive cyanosis, tachycardia, and epigastric discomfort were found in a comprehensive blood analysis. With a heart rate of 105 beats per minute, 6 Laboratory tests such as a complete blood count with platelet count, as well as assessments of serum cretinine and liver enzyme levels, urine protein 24-hour collection, and protein/creatinine ratio, may help to confirm the diagnosis.

Diagnostic Assessment



Complete history gathered by mother and family, physical examination done, abdominal palpation done, per veginal examination done cervical os was fully closed no contractions FHS 130 beats per minute All routine and emergency investigations were conducted in the OPD. The PPTCT test was negative, and the HBSAG blood investigation was also negative. All other blood investigations were normal, with the exception of the CBC haemoglobin level, which was less than normal at 10 mg/dl. Height and weight were taken on admission, and nursing assessment was based on BMI. Her weight did not correspond to the stage of her pregnancy. All radiological examinations, such as ultrasonography and colordoppler, revealed no congenital abnormalities in colour. Doppler Sahli's acid hematin method of haemoglobin estimation was used to determine the level of haemoglobin (10). Hemoglobin levels below 11 g/dL, according to the World Health Organization (WHO), are dangerous.

All comprehensive blood tests were done CBC, examination of serum creatinine and liver enzymes levels, evaluation for urine protein 24-hour collection or protein/creatinine ratio may aid in establishing the diagnosis. An antepartum foetal surveillance urine study (protein 1+) should be performed as part of the prenatal evaluation. Biochemical laboratory tests were performed for foetal monitoring, and her non-stress test revealed that her foetal heart rate was normal at 120-130 beats per minute. Ultrasonography and blood tests were performed several times.

Diagnostic challenges (such as access to testing, financial, or cultural)
Diagnosis: ANC 28 week pregnancy primi gravida with severe anemia.

Prognosis: Good to fair

Therapeutic intervention
Diagnostic challenges arose as a result of her poor socioeconomic situation, so patients enrolled in the Suman card programme, which covered all investigations at no cost and allowed for free normal and

caesarian deliveries, as well as benefits for newborn baby treatment. She was really cooperative during all other testing and examinations. All additional investigations linked to pregnancy were free, including all blood tests (CBC, KFT, LFT), urine rutine and microscopic tests, lipid profile, and all radiographic investigations required for pregnancy[9].

Administration of therapeutic intervention (such as dosage, strength, duration.

Cap Autrine 500mg OD,tab Shelcal 500mg, Cap Autrine 500mg OD, Cap Autrine 500mg OD, Cap Autrine 500mg OD, Cap Autrine 500mg OD, Cap Aut BD Despite quick diagnosis and effective therapy, tab becasule 1od, tab limcee 1od, admittance patient was given iron supplement iv, aulternate day drip was maintained, and for amniotic fluid increase iv intralipid wsa was administered. is linked to significant maternal problems, both short- and long-term. In these types of instances, there are clear protocols for early detection and management of subsequent complications. Monitoring of blood pressure FHS monitoring is required every hour, as is oxygen saturation monitoring and oxygen inhalation at a rate of 2 lit/min, as per the doctor's orders. All essential blood tests were performed on a regular basis, and her husband signed an informed written consent form for severe anaemia. All necessary complications, such as premature labour, low birth weight babies, and intrauterine growth retirement, could occur during and after delivery. Congestive cardiac failure, postpartum hemorrage It's possible that it'll happen, as well as for intrauterine

Changes in ther): Consciousness level:

full consciousness Attention; was completely focused on services and was able to answer any question asked, even if it was a trick question. Orientation: able to be orientated with time, things, relatives, and recognise the services offered Mental states of the patient: was good in terms of language pt able to present her in a good and understandable manner with clear speech able to identify place, time, and date Nursing Evaluation, Diagnosis, and Investigations [8]. After her hospitalisation, her entire blood investigation, radiological investigation, and comprehensive physical evaluation were all completed, thus according to her complete blood and radiological investigation, certain alterations would occur. The doctor advised that the patient be kept in front of the nurses' counter for observation. apeutic intervention (with rationale):improved control and avoidance of any complications, allowing the patient to be protected from additional complications.

Clinician and patient-assessed outcomes (if available):

Despite all of the care, the patient progressed to the active side, and her blood tests were repeated and found to be normal. Her other tests were also normal, and according to the patient's feedback, dysnea, dizziness, weakness, and chest pain were reduced, and the patient's overall condition was better than when she was admitted. When the patient returned to the Gyn OPD for a follow-up on the 20th day, she stated that she had no problems standing or walking, and she was Despite all of the care, the patient is doing well.

Important diagnostic and other test results to follow up on:

To avoid constipation, the patient was instructed to follow up periodically and eat a salt-restricted diet, a low-spicy diet, a high-protin, calcium, and iron-rich supplement diet at the time of discharge. Drink plenty of water and one glass of milk before going to bed. To avoid constipation and controlled coughing, avoid lifting large weights. Travel and strenuous labour should be avoided at all costs.

Intervention adherence and tolerability (How was this assessed?)

The reliable determination of markers with high within-subject variability is required for the assessment of iron insufficiency in pregnancy. Serum ferritin concentrations, for example, might vary by up to 25% from one day to the next. The effect of plasma volume expansion on concentration-dependent indices like ferritin, plasma iron, and haemoglobin adds to the uncertainty about biological variability. Multiple assessments of iron status are recommended, and if this is not possible, within-subject variability should be factored into the confidence in grouping people by iron status. A group of pregnant adolescents with a high prevalence of iron insufficiency is provided as an example of the former technique. Despite the fact that iron status evaluation in human populations has progressed in comparison to other nutrients, there is still a lot of doubt concerning absolute diagnosis during pregnancy. The patient adhered to the intervention and tolerated it well. No adverse or unexpected events have occurred.

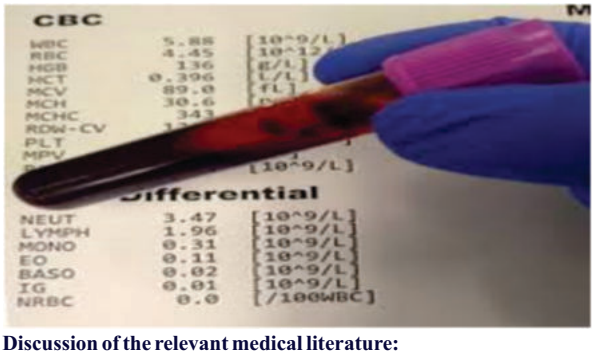
DISCUSSION

This case report's strengths and shortcomings are discussed in a scientific manner.

All blood and radiographic examinations connected to diagnosis play a critical role in the evaluation and subsequent management strategy. It contains information about the patient's current condition as well as all pertinent facts about her pregnancy and complications. Patients with preeclampsia should be treated for a better maternal outcome. A careful assessment, as well as a thorough history gathering (including symptoms of severe anaemia) and physical examination, is required of the clinician. Complete blood test for cbc and all other essential investigations are evaluated in the laboratory. A urine routine was performed, as well as a microscopic examination.

A scientific discussion of the strengths and limitations associated with this case report

Diagnosis related all blood investigation and radiological investigations has a very important role in the evaluation and further plan of management. It provides information regarding patient's present status and all information regarding her pregnancy and complication. Patients with preeclampsia, for better maternal outcome. Clinician must perform detailed assessment along with thorough history taking (including the symptoms of severe anemia) and physical examination. Laboratory tests evaluation for complete blood test for cbc and all other necessary investigation.urine routine and microscopic test was done



Discussion of the relevant medical literature:

Anemia during pregnancy is a condition that occurs when a woman is pregnant. Anemia is a disorder in which the body's haemoglobin (Hb) level is lower than normal, reducing the red blood cells' ability to transport oxygen to tissues. The World Health Organization (WHO) defines anaemia differently depending on age, gender, and pregnancy status: Children aged 6 months to 5 years have a Hb level of 11 g/dl, children aged 5–11 years have a Hb level of 11.5 g/dl, adult males have a Hb level of 13 g/dl, non-pregnant women have a Hb level of 12 g/dl, and pregnant women have a Hb level of 11 g/dl. 4. There are three types of anaemia: mild, moderate, and severe. In developing nations, anaemia in pregnancy is still one of the most difficult public health issues to solve.

Anemia is responsible for 20% of all maternal fatalities worldwide. Severe anaemia contributes to maternal morbidity and mortality, despite the fact that a causal link is not always established. Premature births, low birth weight, foetal damage, and infant fatalities can all be caused by anaemia during pregnancy. Anemia affects approximately two billion people worldwide, with the World Health Organization (WHO) estimating that iron deficiency is responsible for half of these cases [5, 6]. Iron insufficiency is not only the most common but also the most overlooked nutrient deficit worldwide, especially among pregnant women and children in developing countries [7]. In developing nations, nearly 40 million pregnant women suffer from iron deficiency (ID) and its repercussions [8].

CONCLUSION:

According to this study, earlier pregnancy situations may repeat themselves in future pregnancies. Furthermore, the ambulance is used for administrative purposes rather than for medical emergencies by the health administration. On the plus side, visiting a health centre allows a mother to learn about the hospital's existing health offerings, such as Anemia in pregnancy is the most prevalent disorder during pregnancy, so every pregnant woman should be screened for anaemia and treated as quickly as possible with iron-rich meals, as well as having family support and care during her pregnancy. as well as the significance of ANC

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