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A Case Report on Sickle Cell Crisis In A 24-Years-Old

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ABSTRACT:
INTODUCTION: Sickle cell illness is an autosomal passive blood issue that can prompt weakness. It is brought about by a transformation in the hemoglobin quality, which prompts distortion of red platelets. Distorted red platelets can deter little vessels and they are inclined to annihilation. Sickle cell pallor (SCA) was first depicted in the Western writing over 100 years prior. Explanation of its atomic premise provoked various biochemical and hereditary examinations that have added to a superior comprehension of its pathophysiology.
Patient History: A 24 years old female was admitted in HDU Acharya Vinoba Bhave hospital on dated 27TH July 2021 with chief complaint of severe body ache since 3days, Tingling sensation over lower lip and chin area since 10 days. After physical examination and investigation doctor diagnosed as sickle cell crisis. Patient had history of sickle cell disease (ss pattern). She is taking Tab. Folic acid 5mg OD daily. No history of cough, cold and fever.
The Main Diagnosis, Therapeutic Intervention, And Outcome: After physical examination and investigation doctor diagnosed this case of sickle cell crisis. Patient was treated with IV. Fluids-NS, RL, DNS, calcium supplements, antibiotics, analgesic, antiemetic medication and also given inj. Optineuron. Her General condition was moderate. **Nursing Management:** Administered IV fluid, monitor vital sign 6 hourly. Administered medication doctor's order
Conclusion: Timely treatment and management of sickle cell crisis.

Keywords: Sickle cell disease (SCD); Haemoglobin, crisis.

INTRODUCTION:

Sickle cell illness (SCD) is a genetic hemolytic frailty . Sickle-cell iron deficiency is the name of a particular type of sickle-cell sickness in which there is homozygosity for the transformation that causes HbS. Individuals with sickle cell illness have red platelets that contain generally hemoglobin S, an unusual kind of hemoglobin. Hemoglobin – is the fundamental substance of the red platelet. It assists red with blooding cells convey oxygen from the air in our lungs to all pieces of the body. Typical red platelets contain hemoglobin A. Hemoglobin S and hemoglobin C are unusual sorts of hemoglobin. Typical red platelets are delicate, round and biconcave and can just barely get through minuscule veins.[1]

Sickle cell Disease is the most well-known hereditary issue in youngsters living in sub-Saharan Africa. The illness is known to cause more intense scenes in understanding giving SS, SC and S-beta-thalassemia and

furthermore now known to cause various organ pathologies and long haul morbidities and inevitable mortality. The pathologies usually influence the mind (stroke), eyes (retinopathy), kidney (miniature and full scale albuminuria), Bones (intense agony, aseptic putrefaction, osteomyelitis and skeletal deformations) heart (cardiomyopathy and aspiratory hypertension), lungs (Acute Chest Syndrome) and overpowering bacterial diseases. In 1910, sickle cell infection burst onto the Western clinical scene as a "odd" or, as Herrick named it, "another, obscure illness. The infection then, at that point became known as a "dark sickness. In 1927, Hahn and Gillespie had given an account of the component of sickle arrangement, seeing that the sickle hemoglobin in its deoxygenated state accepted the trademark shape, the sickle, that gives the issue its name. Sickle cell illness, perhaps the most well-known acquired sicknesses around the world, is presently perceived to be a problem of worldwide significance and monetary just as clinical importance.[2]

Patients with sickle cell infection require complete consideration including preventive mediations; torment the board, hydroxyurea, and blood bondings. Further, entanglements of bondings like iron over-burden are normal and have critical results like cirrhosis, cardiovascular breakdown, and demise. Because of the unpredictable and crippling nature of sickle cell infection, proper walking the executives is basic to keep away from intense torment and vasoocclusive scenes and hospitalizations. One gauge has proposed that yearly, United States' normal hospitalization costs for SCD are $6,223 per hospitalization. Intercessions intended to forestall SCD entanglements and stay away from hospitalizations are assessed to have generous financial advantages, as the limited lifetime cost of care midpoints $460,151 per patient with SCD.[3]

PATIENT INFORMATION

Patient specific information:

A 24 years old female was admitted in HDU Acharya Vinoba Bhave hospital on dated 27TH July 2021 with chief complaint of severe body ache since 3days, Tingling sensation over lower lip and chin area since 10 days. After physical examination and investigation doctor diagnosed as sickle cell crisis. Patient had history of sickle cell disease (ss pattern). She is taking Tab. Folic acid 5mg OD daily. No history of cough, cold and fever.

Primary concern and symptoms of the patient:

Present case was brought to Medicine OPD with complain of severe body ache since 3days, Tingling sensation over lower lip and chin area since days. Patient had history of sickle cell disease (ss pattern). Her general condition was not satisfactory, patient shifted to HDU. No history of cough, cold and fever.

Medical family and psychosocial history:

Patient had history of Sickle cell disease (SS pattern since 10 years and also history of blood transfusion on 2010, she belongs to nuclear family her family members not having any type of medical illness , like Sickle cell anaemia , diabetes mellitus. She was mentally stable She had maintained good relationship with doctor and nurses.

Relevant past intervention with outcome:

Present case had history of Sickle cell disease (SS pattern since 10 years and also history of blood transfusion on 2010. she took the treatment regularly.

Clinical findings:

General examination
State of health: unhealthy
General condition – not satisfactory
State of consciousness: conscious
Pallor- +
Vital parameter:
Blood pressure: 110/70mhg
Temperature: 99.60^{o} F
Pulse: 70 beats/min.

Respiration: 20breath/ min.
SPO_2:90%
CVS – $S_1 S_{2+}$
P/A – Soft non tender, splenomegaly present

DIAGNOSTIC ASSESSMENT

On the basis of patient history, physical examination and other investigation such as-
MRI –Bilateral temporo-Mandibular Joint-Impression: No obvious abnormality seen in the bilateral Temporo-Mandibular Joint
Hemoglobin- 9.7 g/Dl
Hematocrit – 24%
Leukocyte count- 9,300/mm^3
WBC- 5.6
MCV-65.8
PLT- 69

THERAPEUTIC INTERVENTION

Present case took the medical management with Inj. Piptaz4.5gm, Inj. Levoglox 500mg, Inj. Emset 4mg, Inj. Optineuraon, Inj. Tramadol 100mg, Tab. Hydroxyurea, Tab. Zincovit, Tab. Sodamint, Tab Brufen, Inj Calcium Gluconate,.

Nursing perspectives: IV fluid was provided to maintain fluid and electrolyte. Monitor vital sign per 6 hourly.

DISCUSSION:

A 24 years old female was admitted in HDU Acharya Vinoba Bhave hospital on dated 27TH July 2021 with chief complaint of severe body ache since 3days, Tingling sensation over lower lip and chin area since 10 days. After physical examination and investigation doctor diagnosed as sickle cell crisis. Patient took a medication regularly and her outcome was moderate. For further treatment she was admitted in Acharya Vinoba Bhave hospital.

As per a study in Nigeria, the outcome was Higher degree of schooling of the moms (P=0.013) and having an influenced youngster (P<0.001) were the main considerations related with expanded information base and sound viewpoints towards SCD. Less than half of the moms had moderate information on SCD and its hereditary legacy, and had likewise known about neonatal evaluating for SCD determination before the overview. 66% of moms of the youthful newborn children were able to have their infants or future kids screened and most would favor the children be screened at an inoculation community as opposed to upon entering the world places (P<0.001). Familiarity with, and points of view towards SCD and neonatal screening affected the moms' acknowledgment of evaluating for their children (P<0.05). What's more, a significant number of the moms would require consent from their spouses or a comparative with have their children screened.[4] Interesting studies and cases related to sickle cell disease were reviewed[5-11].

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