Limi Children's Hospital

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4th ABUJA PERINATAL SYMPOSIUM

Let The Newborns Breathe!

Case Summary

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Limi Children's Hospital

Scenario 1

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Baby D.O.

- A preterm male neonate referred to our facility at 10 hours of life. He was delivered at 26Wks +1day via Caesarean section.
- APGAR scores of 5^{1} & 6^{5}, Birth weight- 0.74kg

At Presentation

- He was in respiratory distress, tachypneic, SPo2- 78% on INO2.
- Hypothermic
- Foul smelling dried amniotic fluid on body (?maternal history of chorioamnionitis) with purulent eye discharge.

Immediate admission

- Admitted into NICU
- Incubator nursing, UVC passed, Blood letting chart opened
- Attempts at minimally invasive surfactant therapy failed because of extremely narrow airway.
- CPAP commenced and SPO2 was 98%

Investigations done

- FBC: Leucocytosis, neutrophilia, monocytosis
- MP: +
- Blood culture, Eye swab MCS,
- SB, EUCr, Ca2+ at 24 hours of life

Immediate admission

- Commenced on IV antibiotics, antimalarial, caffeine citrate, Intravenous fluids,
- Nebulized with surfactant,
- Buccal colostrum.
- Managed as EONNS and congenital malaria in an ELBW
- Parents of child were extensively counselled about the clinical state, diagnosis, prognosis as well as possible complications and management challenges

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1st week on admission

- Episodes of apnea and intermittent desaturation- saline nebulization commenced with gentle suctioning PRN
- Noticed to be bleeding from previous puncture, prolonged bleeding time site and was commenced on Vitamin K1
- Had episodes of hypoglycemia- corrected
- Had hypokalemia- corrected
- Prophylactic phototherapy
- Trophic feeds commenced

1st week on admission

3 DOL

- Commenced on parenteral nutrition-3DOL
- NG Tube passed
- Glucose concentration of fluid increased to 12.5%
- Repeat FBC: Downward trend of leucocytes with increased neutrophilia- Antibiotics reviewed
- Weight: 0.72kg by the end of the week

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2nd week on admission

- Apneic episodes and desaturation intermittently- repeat surfactant
- Feeds gradually increased (EBM 1ml 6hrly via NG tube), temporarily withheld for a day due to brown effluent and further increased after
- Repeat FBC; Relative neutrophilia, normal total wbc , anemia (325), thrombocytopenia (125) on 8th DOL
- Fresh whole blood transfusion on the 9th DOL

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3rd week on admission

- UVC removed- catheter tip sent for MCS, Antibiotics and phototherapy discontinued
- Euglycemia on 15th DOL and glucose concentration reduced to 7.5% gradually
- Feeds gradually increased to 6mls 2hrly
- Repeat transfusion of sedimented RBCs
- Repeat MP-scanty- antimalaria
- CPAP changed to plain IN02
- Thrice a week erythropoietin and hematinic commenced
- Peripheral line patency challenges
- WT-0.62kg

4th week on admission

- Commenced on prokinetic
- 0.5ml of soya oil was added in each meal
- Child had occasional episodes of vomiting /regurgitation
- Weaned off Intranasal oxygen
- Planned for PICC – deferred
- Repeat FBC was within normal range
- Asepsis was maintained with minimal handling, child remained stable.
- Breast milk fortifier commenced.

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5th - 9th week on admission

- Baby remained stable
- Managed as a feeder grower with close monitoring,
- SC Erythropoietin and Prokinetics were discontinued(9th week).

70th DOL

- Baby was discharged home, to continue feeding with EBM/BMS with breast milk fortifier at 35ml 1-2hrly.
- To continue iron supplementation, folic acid and calcimax
- To be followed in the OPD in 2 days
- Discharge weight was 1.94kg

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Scenario 2

Scenario 2

Baby M.K.

- A 10 day old extreme low birth weight female neonate, who was delivered via SVD to P2 + 1A woman with GDM at EGA 25 weeks (PCA 26 weeks 3 days) following prolonged premature rupture of membrane.
- Birth weight 0.7Kg with APGAR scores of 8 and 9 in the 1st and 5th minute respectively.

At the referral hospital

- Baby was in respiratory distress with suboptimal saturation on INo2.
- Had intolerance to feeds, coffee brown vomitus and persistent hypoglycemia

Presentation and admission

- Admitted into NICU
- Incubator nursing
- She was in respiratory distress on CPAP, had septic umbilicus with UVC in-situ
- Weight: 0.635Kg.

Initial investigations:

- Leucocytosis (23), neutrophilia (13), monocytosis(5) and thrombocytopenia (90)
- MP (+)
- Hyperglycemia (8.9)
- Blood culture, EUCr, Ca2+, SB,

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Immediate post-admission

- Prophylactic phototherapy
- Commenced on CPAP, Partial parenteral nutrition (IV Fluids + amino acids calcium +potassium) ,IV antibiotics, antimalarial, ranitidine, anticholinergic
- IV Vitamin K1 stat,
- Surfactant via less invasive administration
- UVC was removed and tip sent for culture and sensitivity
- Transfused with platelet concentrate
- Parents were counselled on diagnosis, prognosis, and possible complications that might arise.

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1st week on admission

- Managed as Extreme LBW with NNS
- Reviewed antibiotic regimen with catheter tip culture and sensitivity results
- Post transfusion Full blood count (FBC): Platelets-142.
- Trophic feeds commenced (0.5mls 6hrly) via OG Tube and were gradually increased (2mls 3hrly) with no residuals, then multivitamins, folic acid and vitamin B complex added.
- Anticholinergic was discontinued
- Peripheral line patency challenges

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2nd week on admission

- Transfused with packed reds blood cells on account of anemia
- PICC was inserted to continue partial parenteral nutrition
- Review of feeds on account of residuals.
- Weaned of oxygen supplementation and saturating optimally in room air.
- Antibiotics discontinued

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3rd - 5th week on admission

- PICC was occluded, and peripheral line also occluded following blood transfusion.
- Glycemic control and feeds were increased (4mls 2hrly.)
- Serial counselling of mother and updates on clinical state with challenges
- Stable till **28th DOL**- had increased work of breathing and started desaturating in room air- PRN suction and recommenced INO2 temporarily
- Anemia corrected with serial transfusion to optimize PCV
- Caffeine citrate changed to oral and coconut oil added to feeds
- Transfontanelle USS done showed normal findings for age.
- Weight: 0.65Kg
- Managed as a preterm ELBW feeder grower neonate

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3rd - 5th week on admission

- **38th DOL-** bouts of intermittent vomiting, fever
- Suspected aspirated feeds, with respiratory distress noted- Recommenced on INO2.
- IV steroid for 24 hours
- Repeat FBC- suggestive of sepsis, with leukocytosis, PCV 35%.
- She was recommenced on antibiotics.
- Also commenced on prokinetics, calcimax
- Coconut oil was discontinued and vomiting stopped

3rd- 5th week on admission

44th DOL (PCA 31 weeks 2 days)

- Respiratory distress had subsided completely, weaned off INO2 and stable in room air.
- KMC commenced in NICU
- Weight: 0.764 kg
- Antibiotics discontinued

6th- 9th week on admission

- Had another course of antibiotics
- Transfused repeatedly with packed RBCs.
- Erythropoietin was commenced.
- Caffeine Citrate was discontinued at 35 weeks PCA.
- Weight: 0.895kg to 1.23Kg

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10th week on admission

- She was transferred to cot and obtained good thermoregulation.
- Noted to be icteric, serum bilirubin: total- 14mg/dL and direct- 7.4mg/dL.
- Abdominal scan: revealed normal findings.
- she was commenced on ursodeoxycholic acid (UDCA).
- Repeat FBC: PCV 42.2%, Platelets 122, with normal WBCs.
- suspected to have allergy to cow milk protein and mother was encouraged to give baby breast milk or hypoallergenic infant formula
- She was transferred to the ward and transition to maternal care commenced

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10th week on admission

- suspected to have allergy to cow milk protein and mother was encouraged to give baby breast milk or hypoallergenic infant formula
- She was transferred to the ward and transition to maternal care commenced
- Parents were experiencing financial constraints in continuing care and the option for possible referral or discharge home was discussed with them.

Discharge and Follow-up

- Parents were experiencing financial constraints in continuing care and the option for possible referral or discharge home was discussed
- Baby was discharged home, to continue feeding with EBM as tolerated 2hrly- **75th DOL**
- To continue iron supplementation, folic acid, multivitamins, vitamin B complex, UDCA, erythromycin (prokinetic), calcimax, vitamin C, and erythropoietin every alternate day x 2 more doses.
- To be followed in the OPD every 2 days, until weight is 1.4Kg.
- Discharging weight was 1.26kg.

Follow up

79th DOL (PCA 36 weeks 3 days)

- Tolerating feeds at 18mls 2hrly.
- Weight: 1.365Kg.
- Baby was stable on follow up, with steady weight gain, immunization was commenced.
- Baby had some periods of passage of loose stool and vomiting attributed to cow milk protein allergy.
- 7.1Kg at 7 months 20 days old.

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Who is Limi Children Hospital?_____

The Limi Children's hospital is a is an arm of the Limi Hospital Group located at **No. 39 Ademola Adetokunbo Crescent, Wuse 2, Abuja,** A designated specialty hospital for pediatrics, neonatology and general medical care for children.

Under the auspices/system of the **>40yr old Limi Hospitals** founded in 1982.

The Limi Children's Hospital was commissioned by the Honorable Minister of the FCT in October 2017 amidst glowing commendations and accolades for the vision and contribution to healthcare delivery.

World class Healthcare, All Day, Everyday

Limi Children's Hospital

"...A healthy child is a happy child"

What are the Limi Children Hospital's services?

The Limi Hospitals
Reversing Medical Tourism

We provide **24/7 world-class healthcare solutions** for patients, hospitals, and their doctors in:

- General Paediatrics
- Paediatric Haematology
- Paediatric Dermatology
- Paediatric Neurology
- Paediatric Cardiology
- Paediatric Endocrinology
- Paediatric Gastroenterology
- Paediatric Otorhinolaryngology (ENT)
- Emergency Medicine
- Child and Adolescent Psychiatry

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The Limi Hospital Since 1982

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How to refer patients to Consider The Limi Children Hospital?

The Limi Hospitals
Reversing Medical Tourism

1. Give a standard referral letter & preferably attach any available results
2. **Call:** 08090599994, 09081841655
3. **WhatsApp:** 09024294618
4. **Email:** Limichilrenhospital@gmail.com
5. **Visit:** **No. 39 Ademola Adetokunbo Crescent, Wuse 2, Abuja,**
6. Kindly indicate Doctor's name, & email/phone number especially if you wish to receive a medical report afterwards.

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