BCPS

NEWSLETTER

Faculty of Obstetrics and Gynecology

BCPS
বাংলাদেশ কলেজ অব ফিজিশিয়ানস্ এন্ড সার্জনস্
BANGLADESH COLLEGE OF PHYSICIANS & SURGEONS

Volume 1 || November, 2023

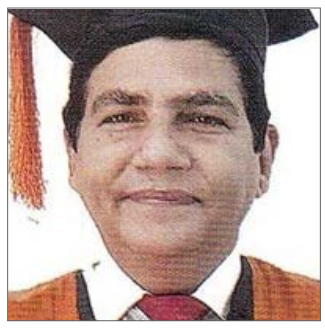
Message from BCPS

Prof. Md. Shahidullah
President
BCPS

Bismillahir Rahmanir Rahim.
After the Covid-19 pandemic, we are struggling with the Dengue outbreak and working to tackle the situation. In this crucial time, Dengue during pregnancy is a big threat to the health of a mother and the baby. If it remains unnoticed or undertreated, Dengue during the peripartum period may jeopardize maternal and fetal outcomes.
Managing Dengue fever according to the National Guideline will allow us to leverage our shared expertise and efficiently guide us during this crisis. I would like to recognize the contribution of Prof. Quazi Tarikul Islam for his excellent stewardship. I also welcome and appreciate the tireless work done by all the members to fulfill the mission. Together, we can do many commendable tasks. I hope this kind of collaboration and teamwork will enable us to communicate with all OBGYN members through a newsletter.
I am fortunate to be closely associated with my colleagues and believe this initiative will benefit mothers with Dengue infection.

Prof. Latifa Shamsuddin
Chairman
Faculty of Obs & Gynae, BCPS

I warmly invite all fellows & members of Obs & Gynae of BCPS to go through the newsletter. The important messages from the experts participating in the webinar on 13/9/23 on “Dengue Fever In Peripartum Period” have been compiled in this newsletter.
I express my heartfelt thanks to Prof. Tarikul Islam, who enriched us through his scholarly presentation. I am grateful to Prof Shahidullah, President, BCPS, Prof ABM Jamal, Honorary Secretary of BCPS, Professor (Major Gen. Retd.) Md. Golam Rabbani, Chairman, and Prof Shaikh Zinnat Ara Nasreen, Member Secretary of the CPD Committee, BCPS, for giving us scope to conduct the webinar. My special thanks are extended to the HODs of the Obs & Gynae dept of different medical colleges & their colleagues, who shared their experiences in the webinar.
I am confident that the knowledge from the newsletter will help our obstetricians to manage obstetric cases suffering from Dengue efficiently. If so happens, this endeavor of the research subcommittee of the faculty of Gynae & Obs will succeed.



Prof. Abul Bashar Md. Jamal
Honorary secretary
BCPS

As the Secretary of BCPS, I am grateful to all of you for your trust. It’s a great honor and privilege to have the chance to work with BCPS. It also entails a great deal of responsibility. I can promise you that the EC committee will do everything to meet and exceed the expectations of every member. We will aim to keep up the momentum built over the last few years by the previous EC despite the obstacles posed by the COVID-19 pandemic. The Faculty of OBGYN has shown off a new feather in its cap with the launch of its inaugural E-Newsletter. This illustrates how we are moving forward in tandem with the other international forums. The information is deep, wise, captivating, and intriguing for anyone eager to learn something new. I’m hoping these may be helpful and fascinating to all of you.
The latest scientific webinar by OBGYN was well organized, and every BCPS member expressed gratitude for it. This demonstrated our main motto in intellectual pursuits. At present, BCPS is operating at a global standard. The best thing is that enthusiastic members from all around the nation are working on it. There are a lot of young, intelligent, and aspirational members who are highly interested in BCPS activities. Therefore, I think we may quickly catch up to the worldwide standard. Receiving ongoing feedback from stakeholders is crucial to the inclusive growth of any community. I hope you will actively participate in this, and please offer us your thoughts, recommendations, and criticisms.
Finally, I would say that -
“Don’t let your learning lead to knowledge.
Let your learning lead to action.”
With warm personal regards.

Key Points: Management of Pregnancy with Dengue Fever

Professor Quazi Tarikul Islam
Editor in Chief; National Guideline for Clinical Management of Dengue 2018 (Revised)

Introduction

CFR (Case Fatality Rate) in Bangladesh due to Dengue fever is 0.5%. But Globally it is 0.1%. Though there are guidelines in Bangladesh, every case should be individualized, and basic principles based on pathology should be maintained.

Key Points

i. As the pattern of Dengue infection has changed, the emphasis should be more on clinical features. In most cases of Dengue Fever, NS1Ag may come negative in the early days of fever. So, along with clinical judgment, CBC and AST can give a good clue before the 5th day of illness.

ii. Not to do antibody tests within 1st five days of illness. Antibody test comes positive from the 5th day onward.

iii. Leukopenia at the beginning also predicts a prolonged disease course. Gross thrombocytopenia may lead to a bad prognosis.

iv. Narrow pulse pressure (<20 mm of Hg) is an important predictor of developing Dengue Hemorrhagic Fever (DHF) or Dengue Shock Syndrome (DSS). Other important clinical predictor parameters are CRT (Capillary Refill Time) if >2 sec and positive Tourniquet test, which is easy to perform. The positive Tourniquet Test is a very important predictor to assess impending DHF. These three bedside tests can guide us to take the necessary steps to prevent the adverse outcome of the worst situation of Dengue.

v. CBC report should mainly focus on HCT (Usually, it should be = 3 × Hb) and WBC. Platelet does not complicate the situation unless DHF and DSS. Should raise concern in the peripartum period when Platelet falls <20000 and if an impending indication for C-section or NVD with episiotomy is needed. One unit of apheretic Platelet needs to be transfused to raise it to 50000/cmm.

vi. As hemodilution occurs in pregnancy, serial HCT is crucial to detect occult bleeding. A rise of 20% from baseline is indicative of DHF.

vii. Despite adequate fluid management, if Hb falls, then search for features of hemolysis by doing LDH, Coomb's test, and Reticulocyte count.

viii. If ascites is present, S. albumin should be done, considering that pregnancy also causes a fall in the albumin level. S. Albumin <3 gm/dl is a bad prognostic sign. In that case, 1 or 2 units of 20% (100 ml) albumin infusion is given to rescue the patient from the worst situation.

ix. In DSS, Troponin-I should be checked along with ECG to exclude one of the worst complications of Dengue Fever (DF), Myocarditis.

x. The risk of SIRS (Systemic Inflammatory Response Syndrome) in DF ↑ in pregnancy should be addressed promptly by the multidisciplinary team (MDT).

xi. Fluid: Hypotension is common in the peripartum stage. So, the fluid should be adequate to restore capillary leakage. Caution while choosing types of fluid: Normal saline, Dextrose Saline, and Cholera Saline (if diarrhea and vomiting) are the main crystalloids to be used. Fluid overload can lead to pulmonary edema.

In hypotension, the **first bolus** with **crystalloid** fluid is given and waited for an hour; if there is no improvement, then **2nd bolus** is given with **crystalloid.** If still not improved, then **colloid/ Albumin** infusion

is used. **Later, a whole fresh blood** transfusion is given. During parenteral fluid management, the patient is meticulously monitored. **FFP, apheretic, or whole blood** should not be transfused solely based on Hb%, prothrombin time, or platelet count.

Xii. Platelet: If there is no bleeding episode or the tourniquet test is negative, a count of up to 20K is safe. Platelets should not be transfused based solely on count.

xiii. There is no role of ionotropic in DSS. Shock occurs usually due to hypovolemia, not cardiogenic in origin. If only myocarditis is followed by hypotension, then ionotropic drugs can be used.

Key points to look at

The following 5 points of initial assessment are beneficial for predicting danger signs in dengue patients.

CCTVR
C = Colour of skin
C = Capillary refill time
T = Temperature
V = Volume of pulse
R = Rate of pulse

The practical use of the National Guideline for Clinical Management of Dengue 2018 (Revised) for every patient will help to reduce the death from Dengue.

Antenatal Management of Pregnancy with DF

Normal Parameter	Non-Pregnant Adult	During Pregnancy			DF
		First Trimester	Second Trimester	Third trimester	
Normal Parameter					
HCT(If baseline unknown, 36 is baseline)	34-44%	31-41%	30-39%	28-40%	-Rising HCT by 20% or more indicates DHF. - Serial HCT-crucial for DHF monitoring
PLT	165-415 x 10^9 /L	174-391x10^9 /L	155-409 x10^9 /L	146-429 x10^9 /L	Rapid ↓ - warning sign of DHF
WBC count		9000-15,000 cell/10^{12}			A ↓trend in absence of leucopenia -DHF
S. albumin (3.5 to 5.5g/dL)	(3.5 to 5.5g/ dL)	2.5-2.8g/dL			A fall of 0.5g/dl from baseline-DHF

Complications:
In most cases - mothers have an uncomplicated antenatal period. But, Other: Preterm birth (41%), Hypertension (12%), Haemorrhage (10%), PPH, Abruption (2%).

ADMISSION CRITERIA

All pregnant women with acute onset of fever or suspected Dengue or confirmed Dengue at any trimester of pregnancy should be advised to get admitted early to a hospital.

Newly revised WHO Dengue case classification by severity:

A) Dengue without warning signs: Group A (Send home).

B) Dengue with warning signs: Group B(Referred for in-hospital care)- All pregnant patients fall in this group.

C) Severe dengue: Group C (Require emergency management).

Patients at Risk of Major Bleeding:

- In prolonged/refractory shock
- Hypotensive shock and renal or liver failure and severe and persistent metabolic acidosis
- Given non-steroidal an-inflammatory agents
- Pre-existing peptic ulcer disease
- On Anticoagulant therapy (in pregnancy with antiphospholipid syndrome, cardiac valve replacement)
- Any form of trauma: vaginal delivery or cesarean section.

Warning Signs Indicating Haemorrhage

To **alert the physician,** to look for bleeding and do **prompt management**:

- Abnormal hemodynamic parameters: tachycardia disproportionate to fever, prolonged CRFT, ↓ UOP with ↓HCT.
- Patients with shock, especially hypotension, postural hypotension, dizziness, and fainting, without ↑ HCT.
- AST/ALT ↑to >200 IU/L.
- Significant ↑ WBC (neutrophil leucocytosis) with reappearance of fever can be due to bleeding.
- Bacterial infection and Hepatitis.
- Tachycardia (>110/min) without fever.
- Sudden fall of HCT below baseline (following fluid resuscitation in shock).
- Drop of HCT >10 points following a bolus of Dextran-40 (administered 10 ml/kg/ hr)

Assessment of Admitted Obstetrical Patient

Always maintain an accurate DENGUE MONITORING CHART and Obstetrical Chart. Obstetric assessment should be done daily or more often depending on the trimester.

Monitoring Parameters	Frequency
General well-being: Appetite, vomiting, bleeding, giddiness, intense thirst, restlessness, clouding of consciousness	At least twice daily
Vital signs: • Temperature, PR, BP, PP and RR (by Multipara monitor) • Pulse volume and CRFT	In Non-shock patients hourly • In shock patients every 15 minutes (until BP is restored)
Hematocrit (HCT/PCV): • In uncomplicated DHF • In unstable patients or those with suspected/ massive bleeding • Administration of fluid bolus (NS/Dextran 40/blood)	Every 3 hours • More frequently if necessary • Before and after each fluid bolus
Urine output: • Maintained urine output at 0.5-1.0 ml/kg/h (calculated for pre-pregnancy body weight). Preferred UOP in pregnancy is 0.75ml/kg/h	Measure 3-4 hours and calculate for every hour.
Fetal Assessment By Kick Chart & FHS	Daily

Indications of Blood Transfusion

- **Mild bleeding –** Do not require. But in pregnancy with DF & bleeding, special consideration & caution must be taken.
- **If source of bleeding is identified:** attempts to stop the bleeding (e.g: repair of genital tract injury).
- **Blood transfusion** is life-saving & given immediately if significant or severe bleeding is suspected or recognised.
- **Not to wait for the HCT** to drop too low.
- At delivery time, if blood loss is **>500ml at vaginal & >1000ml at CS.**

Role of Platelet Transfusion

- Low platelet - Not an indication for prophylactic platelet transfusions.
- **If delivery is evident** or labour progressing despite tocolytics or if LSCS is essential (to save the mother's life), platelet transfused to keep the **platelet >30x10⁹/L and 50x10⁹/L/ respectively.**
- If patient bleeds despite several blood transfusions→ therapeutic platelet transfusions.
- In heavy overt bleeding with low platelet counts.
- Insertion of central venous catheter for CRRT – **aim >30x10⁹/L**

Dengue Fever with Diabetes: MDT MX

- Patients with suboptimal glycemic control with or without co-morbidities -high risk for development of DHF and DSS.
- Blood sugar level must be optimized by continuous insulin infusion and titrated according to blood sugar level. Avoid subcutaneous insulin.

Dengue Fever with PIH: MDT MX

- Hypertensive medication continued with careful BP and pulse pressure monitoring.
- Warning features of impending shock(abdominal pain, vomiting and reduced urine output must be evaluated.
- Send CBC, RFTs, LFTs, and Urine albumin (if required, 24-hour urinary protein and protein: creatinine ratio)
- Fetal surveillance tests I-USG, DOPPLER, CTG, BPP.
- Delivery must be postponed until the patient is out of the acute phase of the disease.
- If delivery is inevitable, pre-delivery preparation by arranging blood and blood products and PLT.
- Injury must be minimal, and operative delivery must be avoided until necessary.
- The increased risk of PPH must be kept in mind.

Don't in Dengue Pregnancy

- Don't miss Dengue in pregnancy diagnosis in each acute febrile illness
- No delay for admission to the hospital.
- No Planned Induction of labor or Surgery
- No MR, No D&C in early pregnancy cases
- Don't miss ready blood in eminent delivery cases.
- Don't miss doing AMTSL.
- Don't give excessive fluid, blood, or blood product.
- No to medical termination of pregnancy or induction of abortion.
- No amniocentesis , CVS or cordocentesis
- No to MR & D& C (discouraged).

Dengue Fever During Peripartum Period

Place of Delivery

In a hospital where a team comprising of an Obstetrician, Physician, Paediatrician/ Neonatologist, Anaesthetist/Intensivist (Multi-Disciplinary Team) and blood/blood components are available.

Mode of delivery

According to obstetrical indications. NVD is preferred over LSCS/Instrumental delivery.

- Elective delivery (IOL or CS) should be postponed till the patient is out of the critical phase (if possible) and planned in the recovery phase with a platelet count **>50x109 /L.**
- If delivery is inevitable, try to **delay** until the platelet count recovers & ↑ to >50x109 /L (If needed-therapeutic platelet transfusions). Aim to delay delivery until the leaking resolves using tocolytic drugs (Magnesium sulfate, Nifedipine, or Atosiban).
- If it becomes mandatory or indicated (decided by MDT), the delivery (IOL or CS) may be considered during the early febrile phase before the onset of the critical phase when the platelet count is >130x109 /L.
- Delivery of IUD could be delayed by at least 1 week if the patient is physically well with intact membranes and there is no evidence of infection, preeclampsia, or bleeding (including laboratory evidence of DIC). If labor is delayed for >48 hrs, testing for DIC should be done twice weekly or more frequently as necessary.

Preparation for Delivery

- Blood and blood products should be cross-matched & saved in preparation for delivery.
- Transfusion of platelet concentrates should be initiated during or at delivery but not too far ahead of delivery, as the platelet count is sustained by platelet transfusion for only a few hours during the critical phase.
- In NVD or LSCS - Fresh whole blood/fresh PCV transfusion should be administered immediately if significant bleeding occurs (monitored HCT and Vitals frequently). As in PPH, do not to wait for blood loss > 500ml/ hematocrit to decrease to low levels before replacement.

Monitoring during delivery

- Vitals (BP /Pulse/Pulse pressure/Capillary Refill) hourly.
- Catheterize to know precise hourly urinary output (aim 0.5ml/kg/hour).
- Carefully titrated fluid replacement (normal saline). Bolus of 5-10ml/kg/hour x 2 hourly given, followed by 3-5ml/kg/hour as maintenance and monitored by urinary output and Pulse pressure(SBP-DBP).
- Progress of labour must be evaluated by partogram, and foetal monitoring must be done by continuous electronic FHR monitoring.
- Consultant obstetrician must perform operative or instrumental delivery to minimise the trauma or injury
- It is essential to check for complete placenta removal and delivery.
- Intense AMTSL done by IV uterotonic, not IM. This is followed by oxytocin 10 IU per hour as a concentrated infusion/ Misoprostol (800mcg) to prevent PPH. Ergometrine is best avoided.
- Give Tranexamic Acid 1g slow IV after delivery by LSCS or NVD at the time of blood transfusion.
- **Intramuscular injections**- be avoided.
- No steroids should be given.

Post Delivery Care

- Keep under strict observation & strict monitoring for BP, Pulse, pulse pressure and urine output.
- Observations regarding Post postpartum haemorrhage.
- If delivery occurs in <7 day from appearance of symptoms of dengue fever, then risk of vertical transmission is high.
- Baby should be evaluated for congenital Dengue
- Breastfeeding is not contraindicated in DF.

Obstetric Management of DF

Phases of illness	Febrile phase (1st 3 days)	Critical/leaky phase (48h following febrile phase)	Convalescent phase
Risk category	**MODERATE TO HIGH-RISK**	**VERY HIGH-RISK**	**MODERATE RISK**
Clinical and laboratory findings	• Fever,headache, myalgia • Low WBC & PLT>130x109/ • Normal HCT • No evidence of fluid leak.	• Rising WBC >5,000 • PLT ↓ing <10X109/L • ↑HCT • USS evidence of fluid leak	A– Appetite ↑ B – Bradycardia C –Rash /Itching D – Diuresis WBC normal, PLT ↑ >50x109 /L PCV normal
Place of management	Pre op: Ward& Post op: HDU/ICU	(HDU/ICU) Level II-III critical care	(HDU/Ward) Level 1-11 Critical care
Specific Inv. before delivery/ OT	• NS1Ag • PLT • Hb, HCT • USS - abdomen & chest	• NS1Ag and IgM • PLT,Hb,HCT • Coagulation, ROTEM • USS -abdomen & chest • SGOT/SGPT	• IgM/IgG • PLT, Hb, HCT • Coagulation, ROTEM • SGOT/SGPT
Specific precautions before operative intervention	MDT discussion: Possible indications for CS First 2 days of fever with PLT>130x109 /L & no USS evidence of fluid leak: Foetal-late FHR decelerations during labour, evidence of FD. Maternal – H/O CS in labour, APH due to placenta praevia even without hypovolaemia, Failed instrumental delivery. 3rd day of fever when PLT <130X109/L, but no USS evidence of fluid leak: Only to save the mother's life -significant placental abruption, maternal cardiorespiratory distress due to a cause other than Dengue.	• Correct PLT >50x109/L • Correct deranged coagulation (ROTEM) • Correct Hb>10 • Optimize organ function • Be ready to manage major PPH, DIC • MDT discussion- Indication of CS/VD- only if the mother's life is at risk or the patient develops spontaneous labour or FD.	• Correct PLT >50x109/L • Correct deranged coagulation • Correct Hb>10 • Be ready to manage PPH • Beware of sepsis in the presence of IUD • MDT discussion- **Indication of CS**- Fetal compromise, Maternal compromise, deteriorating but compensated maternal medical condition, postponed CS during febrile or critical phase.

Source:
1. Ministry of Health-Sri Lanka Guidelines for Clinical Management of Dengue Infection in Pregnancy,2019. 2. DENGUE GCP GUIDELINES FOR PREGNANCY, 2021 3. Dengue in pregnancy management guideline, OGSB,2019.

Case Discussion

Case:1

A 23-year primi at 38 weeks of pregnancy was admitted with a high fever (103), dry cough, and running nose for two days, no history of body ache, abdominal pain or rash, and tachycardia. All investigations were within the normal limit (Platelet 130000 /cmm). She was managed with oral hydration & antipyretic. On Day 4, she became afebrile, but at D6, she complained of less fetal movement; CTG was non-reactive, USG showed AFI 4, and HCT 34% (Normal-32%). Obstetric Mx: LUCS under S/A due to fetal distress on Day 5. She was well-managed and returned home.

Recommended management Schedule

It's a case of group B without any complications. According to guidelines, any pregnancy with Dengue should be admitted. Here, the patient was term pregnant, and F/U was done clinically with daily CBC along with USG & CTG for fetal monitoring.

On the 2nd PND Platelet was 80K/comm and was discharged on the 4th PND with a platelet count of 1 lac/cmm.

Recommended management Schedule (Dengue without warning signs)

Monitoring: Pulse, BP, Temp, pulse pressure, urine output 4 to 6 hrly CRT should be checked. Daily CBC, if needed, other investigation. Monitoring warning signs, do CTG and BPP for fetal monitoring. Obtain reference HCT before Fluid therapy begins.

Management: IV fluid is started if inadequate oral intake or vomiting or If HCT continues to rise despite oral rehydration or impending shock. Any Operative interference or induction should be avoided till the critical period is over. Episiotomy should be avoided. To prevent PPH, AMTSL(Avoid IM & ergometrine) , uterotonic, misoprostol or tranexamic acid is advocated .The Platelet should be at least 50K and readiness for Fresh blood, FFP apheretic platelet.

Case:2

A 23-year-old primi at 39 weeks of pregnancy was admitted with per-vaginal watery discharge. On routine CBC, her Platelet was 35000/cmm. An NS1 antigen test was done concerning the report, which became positive. She was managed by MDT at HDU. And one unit of apheretic plasma & fresh blood were transfused. On D2 & D3, HCT was mildly ↑ed, WBC 23K/cmm, Platelet 75000/ cmm. One unit of apheretic Platelet was given in the latent phase of labor. NVD occurred on D3. Primary PPH was managed with the first bundle response followed by intrauterine balloon (condom) tamponade.

Case:3

A 39-year-old, para 2(C/S) was admitted at 38 weeks pregnancy with Preeclampsia (controlled with drug), LFM, P/V bleeding(scanty, bright red) & DHF(day 7 & afebrile from D5) & respiratory distress(2 days). She had severe oligohydramnios, and CTG was Non-reactive. There were purpuric spots on the skin; pulse was 100/min, BP 140/90 mm of Hg, RR-28/ min; Spo2-80%, diminished breath sound in both lower zones of the lungs (pleural effusion). Urine output was normal. Her Hb was 9.7g/dl, HCT 30%, platelet 16K/ cmm, TC- 23.6K, LDH 1000 U/L, SGOT 607 U/L, SGPT 300. At ICU, she was managed with High flow O2, 4 U FFP, 3 U apheretic platelet, and 9 U platelet concentrate.

On day 8, emergency C/S was done under GA with 2 U apheretic platelets 2 hours before OT. Postoperatively, she was shifted to the ICU without extubation. On D 4, at ICU -Hb was 7.6 g/dl (↓), HCT 28.8%(↓), Platelet 28 K(↑), WBC 20 K(↓) and again 1 U apheretic platelet & 2 U PRBC given. On the 5th POD, extubation was done as she became hemodynamically stable &discharged on the 7th POD.

Recommended management Schedule

DHF/DSS should be managed in the ICU. Start O2 immediately. IV fluid is mainly crystalloid if it needs bolus and also sometimes colloid. Operative intervention in the critical stage should be avoided. Monitoring of clinical findings (at least twice a day), vital signs (at least every 1-2 hours), HCT (at least every 4-6 hours), and urine output (at least every 8 hours) should be done and documented on the chart.

Timely fluid management.

Case:4

A 28-year-old lady, P2G3, was admitted at 39 weeks with prolonged labour pain with FD & Dengue fever for five days(D5). Emergency CS was done. At that time Hb%-10.9gm/dl, Hct-30.6%, platelet count-80000/cmm,SGPT-14 U/L, SGOT-50 U/L. The primary PPH developed(1800ml) was controlled by 1st response bundle and two units of blood. On her 1st POD(D6), Hb was 8.8gm/dl, HCT-24.6%, Platelet count-80000/cmm.On the 3rd POD(D7), the abdomen was distended, and bowel sound was absent. Her Hb%-6.2gm/dl, Hct-16.7%), Platelet count- 190000/cmm. Plain X-ray abdomen AP view in erect posture reveals Subacute intestinal obstruction with suspected 'Ogilvie syndrome.' She was managed conservatively. Another three units of PCV were given, but Hb was still 6.2 gm/dl, PLT -248 K/cmm, coombs test (Direct and Indirect)- Negative, APTT- 32 sec (N-28-36), S. Fibrinogen -468mg/dl. Her PBF showed Leukoerythroblastic anemia with neutrophilic leucocytosis. On that day, she developed Malena and respiratory distress with a Saturation of 91%. After resuscitation, USG revealed bilateral pleural effusion with moderate ascites with distended bowel loops. With the MDT approach, she was shifted to the ICU, where she was managed by Furosemide,1 unit of fresh blood, 1 unit of Albutin (S. Albumin-2.06 g/dl-23.8.23, 2.83 g/dl-27.8.23). She improved gradually, and on the 10th POD, she was discharged.

Recommended management Schedule

Severe DF: group- C (3) expanded Dengue Syndrome. Unusual manifestations with severe organ involvement such as liver, kidneys, brain, or heart associated with Dengue infection are reported in DHF and DF who do not have evidence of plasma leakage. Severe Dengue can be complicated by Myocarditis, Encephalopathy/ Encephalitis/Acute liver failure, AKI, ARDS, and sometimes multiorgan failure (MOF). It may be associated with co-infections, co-morbidities, or complications of prolonged shock. Medicine Specialists/Pediatricians should manage this complicated patient for comprehensive care in a tertiary care setting.

Case:5

A 27-year-old woman, P2 (LSCS) G3, was admitted at 36+5 weeks of pregnancy with IUFD, Scar pain, and Dengue fever for four days. On admission, Hb is 13 gm/dl, Hct is 41%, and Platelet count is 77000/cmm. At D5 of her fever, LSCS was done under GA. Preoperatively, Bleeding was average & ascitic fluid

was present. After AMTSL, a B-Lynch suture was given as the uterus was atonic. Postoperatively, as she was hemodynamically unstable, she was shifted to ICU intubated. At ICU, Pulse – 151 beats/min, BP –not Recordable, Saturation – 98% (mechanical ventilation), P/V/B – Average. After the MDT approach, Ionotropes, Plasmasol, Platelet concentrate, Whole blood, and FFP were given. Signs of DIC are evident in Petechial rashes and increased drain tube collection. BP was still non-recordable. Hb dropped to 8.8 hm/dl platelets 27000, HCT 25.4%, D dimer 9.8, ABG revealed acidosis. Despite all the measures, the patient did not recover from shock. She expired on D6 due to Decompensated dengue shock syndrome and DIC.

Recommended management Schedule

Severe DF: Group C-4: Evidence of plasma leakage

Rise in Hct: 20% (eg. In children 35-42 and adults 40-48).Circulatory failure: Cold/cold clammy skin, CRFT>2 Sec, tachycardia, weak pulse, narrow pulse pressure <20, hypotension.Fluid accumulation – Ascites/ Pleural effusions Albumin <3.5 gm/dl.Plasma leakage can be identified by measuring blood pressure. Dengue shock is hypovolemic shock that can be compensated by plasma blood and albumin.

There is no role of inotropes as it is not cardiogenic shock. Secondary bacterial infection may be complicated. Systemic inflammatory Response Syndrome can worsen the case.

Case:6

A22-year-old primi patient at 38 weeks of pregnancy was admitted with a fever for four days and Dengue NS1 positive for one day. Her Hb was 12.30 g/dl, platelets were 25000/cmm, and HCT was 38. The next day (D 5), she developed LP; her platelets were 15000/cmm. Four units of apheretic platelets were given before CS. Because of prolonged labour with LSCS, CS was done on D 5. Per-operatively, bleeding was >average. Postoperatively, BP & O2 saturation fell and shifted to ICU. On the 3rd POD, her Hb was 13.7/dl, platelets 30000/cmm, and HCT-42.6. To maintain BP, an ionotropic drug was given. From the 4th POD, platelets count gradually rose (31000, 49000, 65000), and O2 demand decreased and shifted to HDU. On the 7th POD, her platelets were 230000/cmm and stable and discharged.

Recommended management Schedule

Severe DF: Group C-1 (severe plasma leakage)- Needs tertiary level care.

It has been observed that there is a minimal role of platelet transfusion. In most situations, a fresh whole-blood transfusion is sufficient. However, it may be required in some special cases. The indication of which may be as follows:

1. Very Severe Thrombocytopenia who needs urgent surgery

2. Clinical judgment of the treating physician.

Webinar Information
Experience Sharing of Cases of Dengue fever during the Peripartum Period

The Obstetrics and Gynecology faculty of BCPS organized a CPD on 'Experience Sharing of Cases of Dengue Fever during the Peripartum Period' on 13.9.23. BCPS research subcommittee member secretary Fahmida Rashid conducted the entire CPD. Prof. Latifa Shamsuddin, BCPS Obs & Gynae faculty chairman, and Prof. Farhana Dewan, OGSB president, were present as chairpersons. The session's audience, presenters, chief guests, special guests, and chairpersons were welcomed by Prof. Sheikh Zinnat Ara Nasreen (Member Secretary, CPD Committee, BCPS).

Prof. Md. Titu Miah complimented BCPS' OBGYN faculty and CPD committee for choosing a time-demanding webinar topic for all working Ob-Gyns, medicine faculty, and other faculties. He stressed that Dengue mortality during pregnancy and the peripartum period is substantially higher than without pregnancy. Thus, knowledge refreshment is crucial. The patient's first management should be correct, and a prompt referral to a higher center for better management was highlighted.

Young, dynamic presenters presented five practical case-based scenarios from five hospitals: Dr. Rushdana Rahaman (DMCH), Dr. Mahfuza Asma (SSMCH), Dr. Shoyela Shahnaz (CMCH), Dr. Farzana Khan (Mugda Medical College & Hospital), and Dr. Tasneea Zareen Moushumi(Square Hospital PVT. LTD). Esteemed OBGYN specialists Prof. Fatema Rahman (DMCH), Prof. Afroza Kutubi (SSMCH), Prof. Shahena Akhter (CMCH), Dr. Fahmida Naz Mustafa (Assoc. Prof, Mugda Medical College), and Dr. Nargis Fatema(Chief consultant, Square Hospital) commented after each case presentation. Prof. Qazi Tarikul Islam, a dengue management expert who has worked hard on national guidelines and mortality reviews, was present as a resource person. He reviewed each peripartum dengue case care insightfully.

After the interactive session, special guests Prof. Sameena Chowdhury, Prof. Saleha Begum Chowdhury, and Prof. Abul Bashar Md. Jamal and Prof. Salma Rouf discussed on Dengue's endemic, especially peripartum Dengue. In addition, they emphasized the importance of referring patients to higher centers as soon as possible.

At the end of the discussion, Prof. Latifa Shamshuddin briefly discussed the practical management of Dengue patients throughout the peripartum period during this crisis and the need for research on mother and newborn outcomes.

Prof. (Major Gen.Retd.) Md Golam Rabbani, the BCPS CPD committee chairman, finished the session by thanking all speakers, resource persons, chief guests, special guests, and chairperson. He also thanked the organizer for picking such a time-demanding topic.

Faculty of OBGYN

Chairperson

Professor Latifa Shamsuddin

Co-Chairperson

Professor Saleha Begum Chowdhury

Member Secretary

Professor Ratu Rumana Binte Rahman

Joint- Secretary

Professor Dipi Barua

Sub-committee OBGYN, BCPS

Sub- Committee for training monitoring
Sub- Committee for research works
Sub- Committee for E-logbook & Medical education
Sub- Committee for working with skill lab
Sub-committee for working on ethical issues
Sub-committee for working with question bank
Sub-committee for student's welfare & education
Sub-committee for curriculum development

Editorial Board

Advisors

Prof. Rowshan Ara Begum

Prof. Sameena Chowdhury

Prof. Rowshan Akhter

Prof. Ratu Rumana Binte Rahman

Prof. Shaikh Zinnat Ara Nasreen

Prof. Fatema Ashraf

Members

Dr. Fahmida Rashid Swati

Dr. Arifa Sharmin Maya

Dr. Lutfa Begum Lipi

Dr. Sharmin Abbasi

Dr. Shain Fariya Shetu

Dr. Shoyela Shahnaj

Published by: Sub-Committee for research works, Faculty of Obstetrics and Gynecology, BCPS