OBSTETRIC GUIDELINES FOR NON SPECIALIST HOSPITALS/CLINICS IN THE STATE OF SARAWAK – FEBRUARY 2012

A. NEW GUIDELINES ON PIH/PE

- Daily low dose aspirin 75mg (1/4 tab of 300mg tablets) to be given to antenatal mothers from 12 weeks onwards till 36 weeks or till delivery if they have one or more of the following risk factors:
  - ✓ Timing Hypertensive disease in previous pregnancies
  - ✓ Chronic renal disease
  - ✓ Autoimmune disease like SLE, anti-phospholipid syndrome
  - ✓ Type 1 or 2 diabetes
  - ✓ Chronic hypertension
- Timing of delivery for antenatal mothers with PE is by 37 weeks POA
- Timing for delivery for antenatal mothers with PIH on anti-hypertensive is by 38-39 weeks POA (depending on cervical favourability)
- Timing of delivery for PIH not on anti-hypertensives by 40 weeks POA
- Patients with severe PIH/PE should be given IM 5GM of Magnesium Sulphate in each buttock before transfer to a hospital
- Patient should have 1 or 2 functioning IV line before transfer
- A syringe filled with 2GM of Magnesium Sulphate should be prepared and labelled and brought along in the ambulance to be given IV slow bolus over 5 minutes if the patient had an episode of eclampsia in transit
- A 10mg ampoule of diazepam (valium) should also be made available in the ambulance. It can be prepared in the ambulance and given by slow bolus IV over 5 minutes, if the repeated IV slow bolus of 2MG magneseium sulphate does not abort the eclampsia.
- In the absence of IV line, the above can be given IM
- Where available per rectal 10mg diazepam is an acceptable alternative to IV diazepam in cases where an IV line is not available

B. ANTENATAL & POSTNATAL MOTHERS ATTENDING OPD/A&E

- Recurring incidences of maternal deaths in the state occuring from poorly managed antenatal & postnatal mothers attending OPD/A&E is very worrying
- All such patients **MUST** be reviewed by a Medical Officer and in specialist hospitals by an O&G Medical Officer
- All such patients must be treated as **'HIGH RISK CASES'**
- Low tolerance to admitting patients for further monitoring & management (particularly if from far)
- Risk of DVT & pulmonary embolism is significant in unwell mothers, particularly those that have poor appetite and does not ambulate well.
- Infectious diseases also poses a significant risk during pregnancy and in the postnatal period and should be treated appropriately

C. GENERAL ADVICE TO REDUCE RISK OF DVT / PULMONARY EMBOLISM

- Complete Rest in Bed (CRIB) is generally not recommended
- Antenatal & postnatal inpatients are advised to ambulate and move their lower limbs regularly to reduce risk of DVT
- Patients with known history of DVT or at high risk of VTE should be managed accordingly after consultation with an O&G specialist
- **All postpartum patients should be counseled about DVT/VTE risk by the MO or the nursing staff upon discharge:**
    - ✓ Drink sufficient water (approx. 6 glasses per day)
    - ✓ Encourage ambulation
    - ✓ To seek treatment early if feeling unwell, not ambulating or unable to tolerate orally
- All postnatal patients are at risk of DVT/VTE, medical staff doing home visiting or upon seeing postnatal mothers in clinics/A&E/OPD should be aware of such risk.
- Postnatal patients in the pueperal period must be asked, **"ARE YOU FEELING WELL?", "ARE YOU DRINKING ENOUGH WATER?", "ARE YOU ABLE TO MOVE AROUND?"** and they should be advised to seek medical care as soon as possible whenever, they are unwell or unable to drink or ambulate.

D. GRANDMULTIPARAS

- Should be 'strongly' advised to deliver in specialist hospitals
- Over 60% of maternal mortality in Malaysia are grandmultiparas
- Grandmultips presenting in labour in non specialist hospitals **must be** reviewed and managed by a MO. Cases should be referred to an O&G specialist and managed as advised.
- MO should review the patient during the immediate post partum period

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E. INDUCTION OF LABOUR

- Induction for post date should be performed at **40 weeks plus 7 days** in non specialist hospital setting. This is due to the prevalence of 'unsure of dates' and lack of dating scan in the district, thus the policy to induce these patients slightly earlier than in specialist hospitals is preferred.
- Induction for any other indication than for 'post date' should be discussed with the O&G specialist on call/ 'buddy' specialist
- Only 1 prostaglandin E2 should be inserted per day and only 2 prostin insertions are allowed. Approval for the 3rd prostin should be obtained from the 'buddy' specialist or the O&G specialist on-call.
- Monitoring should be performed as follows:
    - ✓ CTG should be done and 'reactive' before the insertion of prostaglandin
    - ✓ CTG should be repeated about 1 hour post insertion
    - ✓ MO **must attend** immidiately if uterine hyperstimulation is diagnosed
    - ✓ At least 2 hourly 'timed contractions' when contracting

- ✓ CTG should be repeated 4 hourly as long as the patient continues to contract (*pls take note of the rate of uterine contractions on the trace)
- ✓ Where CTG is not available, other methods of fetal heart monitoring is acceptable.
- ✓ MO **must review** & sign on all abnormal CTG trace

F. INDUCTION FOR 'SOCIAL' INDICATIONS:

- The department of O&G as a principle do not recommend induction or elective LSCS for trivial/social reasons such as, 'looking for a good date'.
- However, induction for social reasons may be beneficial for a high risk antenatal patient (grandmultip, elderly, h/o PPH, retained placenta) if the patients stays in remote areas and/or may have difficulty getting a hospital for delivery.
- Clinicians managing antenatal patiens with such a profile should consider earlier delivery at about 37 weeks POA
- Docotrs managing any high risk patients (PIH, GDM, twins, etc) who are at risk of not being able to deliver in hospital due to very low socio-economic status, staying in remote areas or have transportation difficulties, should consider admitting the patient in the hospital at about 36 weeks or earlier depending on circumstances and consider an earlier IOL for social reasons.
- Home deliveries or even clinic deliveries in high risk patients may result in maternal morbidity or mortality.

G. 'TRIAL OF SCAR'

- Ideally, should be carried out only in specialist hospitals
- Patients with previous scar should be counseled by the attending Medical Officer (MO) at 32-36 weeks POA about 'mode of delivery'
- Patients who prefers a 'trial of scar' and are not contraindicted, should be advised to go to the nearest specialist hospital when in early labour and not wait till they are in advanced labour
- Patients who presented to the non specialist hospital in labour should be transferred to the nearest specialist hospital if possible
- If patient arrives in advanced labour, consult the O&G specialist on call and manage as advised
- If patient refuse to be transferred, consult O&G specialist for advice.

H. LSCS WITH A PREVIOUS LSCS SCAR

- All elective LSCS with a previous scar <u>should</u> be performed in specialist hospitals or district hospitals with O&G specialist. Obtain an appointment date by 34 weeks.
- Emergency LSCS with a previous scar, please consult the O&G specialist on call for advice. Decision should be based on:
  - ✓ Expertise availibility
  - ✓ Indications for LSCS
  - ✓ Distance from specialist hospital
  - ✓ Availibility of transport

I. GENERAL ADVICE FOR LSCS IN THE DISTRICT HOSPITAL

- MO who lacks experience to perform LSCS should be assisted by a colleague who is more experienced
- Relatively more difficult LSCS (ie. LSCS at full dilatation or after failed instrumental delivery) should be performed by the more experienced MO in the district
- MO should seek assistance from their colleagues early when facing difficulties during an LSCS.
- Unless contraindicated, all patients who had LSCS in the district hospitals should be given thromboprophylaxis 6 hours after the procedure for 7 days or until the patient is discharged.
    - ✓ Subcutaneous low molecular weight heparin (e.g. clexane 40mg OD or tinzaparin 0.45mls OD for women between 50Kg to 90Kg)
    - ✓ Subcut. heparin 5000 IU BD
    - ✓ Dose may differ depending on patient's weight
    - ✓ **If considered as 'High Risk' (refer to VTE guide) then the postnatal mothers should be given 7 days of LMWH even after discharge**
- All post LSCS patient should be encouraged to ambulate early or exercise their lower limbs regularly to reduce the risk of DVT or venous thromboembolism (VTE)
- Patients who at high risk of DVT or Pulmonary Embolism should be given the full 7 days of thromboprophylaxis

J. INSTRUMENTAL DELIVERIES

- Forcep delivery is discouraged unless the MO is experienced or has been privileged & credentialed to perform the procedure.
- Ventouse delivery is allowed providing the MO is able to perform the procedure and all the prerequisites/criteria are fulfilled
- If the on-call MO has no experience, please obtain the assistance of a colleague who can perform the procedure.
- **After office hours**, the MO should ensure that LSCS can be arranged quickly should the attempted ventouse fail. The OT staff on call would have to be informed and transport to pick them put on standby.

K. TWIN & BREECH VAGINAL DELIVERIES

- Both type of deliveries should not be conducted in district hospitals
- ECV should be recommended for breech presentations at 36 weeks onwards, providing the patient is not in labour and there are no contraindications
- The patient can be referred to a specialist hospital for ECV. Kindly consult O&G specialist or MO on-call for appointment.
- MO in non specialist hospital should not attempt ECV unless has been priviledged & credentialed to perform it.
- In cases of twin pregnancy or breech presentation presenting to district hospitals in advanced labour, please consult O&G specialist for advice
- All must be started on 40 units pitocin/500mls NS, to run over 4 to 6 hours soon after delivery after the routine bolus dose of uterotonics
- All grandmultips must be closely monitored at 30 minute intervals for at least 4 hours in the post delivery period, preferably in the Labour Ward or in the acute bay of the Maternity/Female ward.

L. GENERAL RULES TO FOLLOW FOR LABOUR MANAGEMENT

- All abnormal CTG trace must be reviewed and signed by the MO on call or MO on duty
- If CTG is not available, regular fetal heart monitoring must be performed and recorded on the case note or appropriate charts
- In the second stage of labour when CTG trace are usually difficult to interprete, fetal heart monitoring after each contractions should be noted and recorded
- Active phase of labour starts at 4cm cervical dilatation
- All patients in the active phase of labour or those who had ARM following IOL should be started on the Partogram
- Non high risk pregnancies in labour should be reviewed at least 4 hourly and if there is a delay in progress, the MO on duty should be informed and review the patient
- MO on duty must be informed & attend stat all cases of hyperstimulation (contractions $\geq$ 5 in 10 minutes), 'fetal distress', shoulder dystocia, massive APH/PPH or other obstetric emergencies

M. 'CODE RED' – RESPONSE TO O&G EMERGENCIES CALL SYSTEM TO BE IMPLEMENTED IN ALL HOSPITALS

- The CODE RED call system should be activated for obstetric emergencies like major obstetric haemorrhage, eclampsia, cord prolapse and when a patient collapses
- Each hospital should identify the staffs who should be called by the operator/staff and what would be an acceptable response time
- In a typical non specialist district hospital, the MO on-call, NS of LW or senior nurse in-charge must be called at the same time. If surgery maybe required then the MO must ask the operator/staff to call the OT staff/lab staff to come in.
- On activation of Code Red in district hospitals, ambulance driver and ambulance should be on standby for possible transfer. This would reduce the time taken to transfer patient or to perform surgery or to obtain blood.

N. MANANAGEMENT OF MASSIVE PPH

- LW staff and Medical Officers have to organize drills to familiarize themselves with the acute management of massive PPH
- PPH Box to be available in all Labour Wards
- PPH Quick Guide is made avilable and should be in PPH box
- Prevention is the best policy!
- All mothers at high risk of PPH (grandmultip, previous h/o PPH &APH, polyhydramnios & multiple pregnancies) should have their blood cross-matched if presenting to district hospitals/clinics in labour
- All high risk patients should have 40 units pitocin/500ml N/S for 4 hours after delivery – **compulsory!**
- Diagnose early, respond quickly and manage appropriately....**REFER EARLY!**
- IM carboprost (haemabate) will be made available in all hospitals shortly. Follow PPH quick guide on use of Carboprost.
- Use Bakri balloons as per guideline, once inserted refer to specialist hospital
- Obtaining blood as quickly as possible is crucial in managing PPH. Blood should be sent along with patient when she is transferred to a specialist hospital
- Refer to PPH management chart

O. GOOD PRACTICE WHEN REFERRING ILL OBSTETRIC PATIENTS TO SPECIALIST HOSPITALS

- Generally, the time taken between the decision to transfer and arrival in specialist hospital is longer than expected with transport being the main issue. Appropriate planning of getting the driver and transport to be on standby is important in ensuring the transit time is kept to a minimum.
- Optimize patient before transfer, having at least one IV line should be compulsory
- Ensure a medical staff (preferably a MO) escorts the patient. If the MO is unable to escort because there are no other doctors in the hospital/clinic, inform the specialist and get a staff nurse or AMO to escort.
- In cases of APH or PPH, bring available blood along
- The ambulance should be equipped with resuscitative equipment
- The ambulance should be equipped with a non invasive digital BP monitor

P. DUTIES OF THE HOSPITAL DIRECTORS

- **Hospital directors** to ensure regular drills for obstetric emergencies should be carried out at least 6 monthly in all district hospitals
- **Hospital directors** to ensure regular annual updates on current obstetric management for doctors & nurses managing maternity patients are carried out
- **Hospital directors** to ensure regular 'audits' of poor clinical outcomes are carried out regularly as stipulated in the recent 'State Health Conference' in Miri.
- **Hospital directors** to ensure the above guidelines are implemented and practiced. Hard copy of this guideline must be made available in LW & Female ward for easy reference.

Q. GENERAL ADVICE

- Consultation & discussion of any difficult O&G cases with the assigned 'buddy' specialists or O&G specialist on-call are encouraged
- Consultations with the 'buddy' specialists only within office hours
- Kindly post this Obstetric Guidelines on the notice board in LW for easy quick reference

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