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Tarikh : 18 Mac 2011

Semua Ahli Panel Kajisemula Senarai Ubat-ubatan
Kementerian Kesihatan Malaysia

Semua Pengerusi JKK Ubat-ubatan KKM

Pengarah
Bahagian Perkembangan Perubatan
Kementerian Kesihatan Malaysia

Pengarah
Biro Pengawasan Farmaseutikal Kebangsaan
Kementerian Kesihatan Malaysia

Semua Timbalan Pengarah Kesihatan Negeri (Farmasi)

Ketua Pegawai Farmasi
Hospital Kuala Lumpur

YBhg Datuk/ Dato'/ Datin/ Tuan/ Puan,

**Penggunaan Ubat-ubat *Off-label* untuk Indikasi Obstetrik dan Ginekologi (O&G)
di Fasiliti KKM**

Dengan hormatnya saya merujuk perkara di atas.

2. Sukacita dimaklumkan bahawa Mesyuarat Panel Kajisemula Senarai Ubat KKM Bil. 3/2010 yang telah diadakan pada 11 November 2010 telah meluluskan penggunaan secara *off-label* dalam rawatan O&G untuk 6 jenis ubat seperti berikut:

- i. *Tocolytic Agents in Preterm Labour*
 - a. Terbutaline 0.5 mg/ml injection
 - b. Salbutamol 5 mg/5ml injection
 - c. Nifedipine 10 mg tablet
 - d. Terbutaline 2.5 mg tablet
 - e. Salbutamol 2 mg tablet
- ii. Misoprostol 200 mg tablet *for the management of stable first trimester Miscarriages < 13 weeks*

3. Bersama-sama ini disertakan garis panduan pemberian ubat-ubatan tersebut kepada pesakit (Lampiran 1) untuk makluman dan tindakan YBhg Datuk/ Dato'/ Datin/ Tuan/ Puan.

4. Dimaklumkan juga bahawa penggunaan ubat-ubat tersebut hendaklah dimulakan oleh pakar O&G yang bertugas di Kementerian Kesihatan Malaysia sahaja.

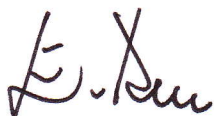
5. Sehubungan dengan itu, mohon kerjasama Timbalan Pengarah Kesihatan Negeri (Farmasi) untuk menyampaikan maklumat ubat-ubatan yang tersebut di atas kepada semua Ketua Jabatan O&G di hospital/ institusi di negeri masing-masing.

6. Segala kerjasama yang diberikan amat dihargai dan didahului dengan ucapan terima kasih.

Sekian, terima kasih.

'BERKHIDMAT UNTUK NEGARA'

Saya yang menurut perintah,



(DATO' EISAH BINTI A. RAHMAN)
Pengarah Kanan Perkhidmatan Farmasi,
Kementerian Kesihatan Malaysia.

DOSING GUIDELINES FOR THE OFF-LABEL USE OF DRUGS IN OBSTETRIC AND GYNAECOLOGY

YEAR 2011

**Obstetric And Gynaecology
Therapeutic Drug Working Committee
MINISTRY OF HEALTH, MALAYSIA**

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1. DOSING GUIDELINES FOR THE OFF-LABEL USE OF TOCOLYTIC AGENTS IN PRETERM LABOUR

1.1 Aim of tocolysis

- i. To allow time for completion of antenatal steroid therapy (24 hour from 1st dose)
- ii. In-utero transfer to another hospital for the benefit of the fetus (ventilator)

1.2 Contraindications of tocolysis

- i. Chorioamnionitis
 - ii. Intrauterine death
 - iii. Fetal abnormality / fetal distress
 - iv. Maternal cardiac disease
 - v. Hyperthyroidism
 - vi. Advanced labour (os > 5cm)
 - vii. Antepartum haemorrhage
 - viii. Hypertension
 - ix. Diabetes mellitus
- } To discuss with specialist

1.3 Prerequisites for starting tocolysis

- i. Normal viable fetus
- ii. No maternal medical contraindication for labour suppression
- iii. Normal maternal ECG
- iv. Baseline random blood sugar level (RBS)
- v. Baseline serum electrolytes (BUSE)
- vi. CTG if gestation > 32 weeks

1.4 Tocolytic agent / regime

1.4.1 Terbutaline Sulphate Infusion Regime (Terbutaline Sulphate Inj 0.5mg/ml)

- Increase infusion every 15 minutes
- Maximum infusion rate 80 drops per minute (240ml/hr)

Terbutaline Dosage (mcg/min)	Infusion syringe pump 2.5mg (5ml) + 45ml Dextrose 5% or Normal Saline		Dropmat 2.5mg (5ml) + 500ml Dextrose 5% or Normal Saline	
	Drop per minute (dpm)	ml/hr	Drop per minute (dpm)	ml/hr
2.5	1	3	10	30
5	2	6	20	60
7.5	3	9	30	90

Terbutaline Dosage (mcg/min)	Infusion syringe pump 2.5mg (5ml) + 45ml Dextrose 5% or Normal Saline		Dropmat 2.5mg (5ml) + 500ml Dextrose 5% or Normal Saline	
	Drop per minute (dpm)	ml/hr	Drop per minute (dpm)	ml/hr
10	4	12	40	120
12.5	5	15	50	150
15	6	18	60	180
17.5	7	21	70	210
20	8	24	80	240

1.4.2 Salbutamol Infusion Regime (Salbutamol Inj. 5mg/5ml)

- At the rate of 10-45mcg/min increased at intervals of 10 minutes until evidence of patient response as shown by reduction of strength, frequency or duration of contractions: maintain rate for 1 hour after contractions stopped, the gradually reduce by 50% every 6 hours (Available in MOH Drug Formulary)

Salbutamol Dosage (mcg/min)	Infusion syringe pump 5mg (5ml) + 45ml Dextrose 5% or Normal Saline		Dropmat 5mg + 500ml Dextrose 5% or Normal Saline	
	Drop per minute (dpm)	ml/hr	Drop per minute (dpm)	ml/hr
10	2	6	20	60
15	3	9	30	90
20	4	12	40	120
25	5	15	50	150
30	6	18	60	180
35	7	21	70	210
40	8	24	80	240
45	9	27	90	270

1.4.2.1 Monitoring for Beta-Agonist Infusion Regimen

- Maternal blood pressure every 10 minutes (Salbutamol) or 15 minutes (Terbutaline), inform doctor if $\leq 90/60$ mmHg
- Pulse rate (every 10 or 15 minutes), inform doctor if > 120 bpm
- Maternal temperature every 4 hourly
- Contraction every $\frac{1}{2}$ hourly
- Auscultation of lungs every 4 hourly
- Continuous cardiac monitoring
- Random blood sugar / glucometer 4-6 hourly
- BUSE 4-6 hourly
- Fetal Heart Rate monitoring

- Input / Output charting

1.4.2.2 Complications

- Fetal tachycardia
- Palpitation
- Headache
- Maternal Tachycardia
- Maternal Hypotension
- Maternal Pulmonary edema
- Hypokalaemia
- Hyperglycemia

1.4.2.3 Cessation of tocolysis

- Symptoms of intolerance (e.g. palpitation, severe tremor, chest pain, vomiting, severe headache and restlessness)
- Maternal heart rate > 120 bpm
- Maternal SBP < 90mmHg or DBP < 60mmHg
- Sign & Symptoms of pulmonary oedema
- FHR > 160bpm
- Maternal Hypokalaemia
- Uterine contractions persist despite maximum infusion for 6-8 hours

1.4.3 Nifedipine 10mg Tablet

- Oral: 20mg given as a stat dose followed by another 20mg in 30 minutes if contractions persist (max 40mg in the first hour)
- Maintenance; Oral: 20mg 6-8 hourly, 6-8 hour of the last dose for 72 hours

1.4.4 Terbutaline 2.5mg Tablet

Oral: 2.5-10mg every 4-6 hour if indicated and tolerated

1.4.5 Salbutamol 2mg Tablet

Oral: 4mg 3-4 times daily

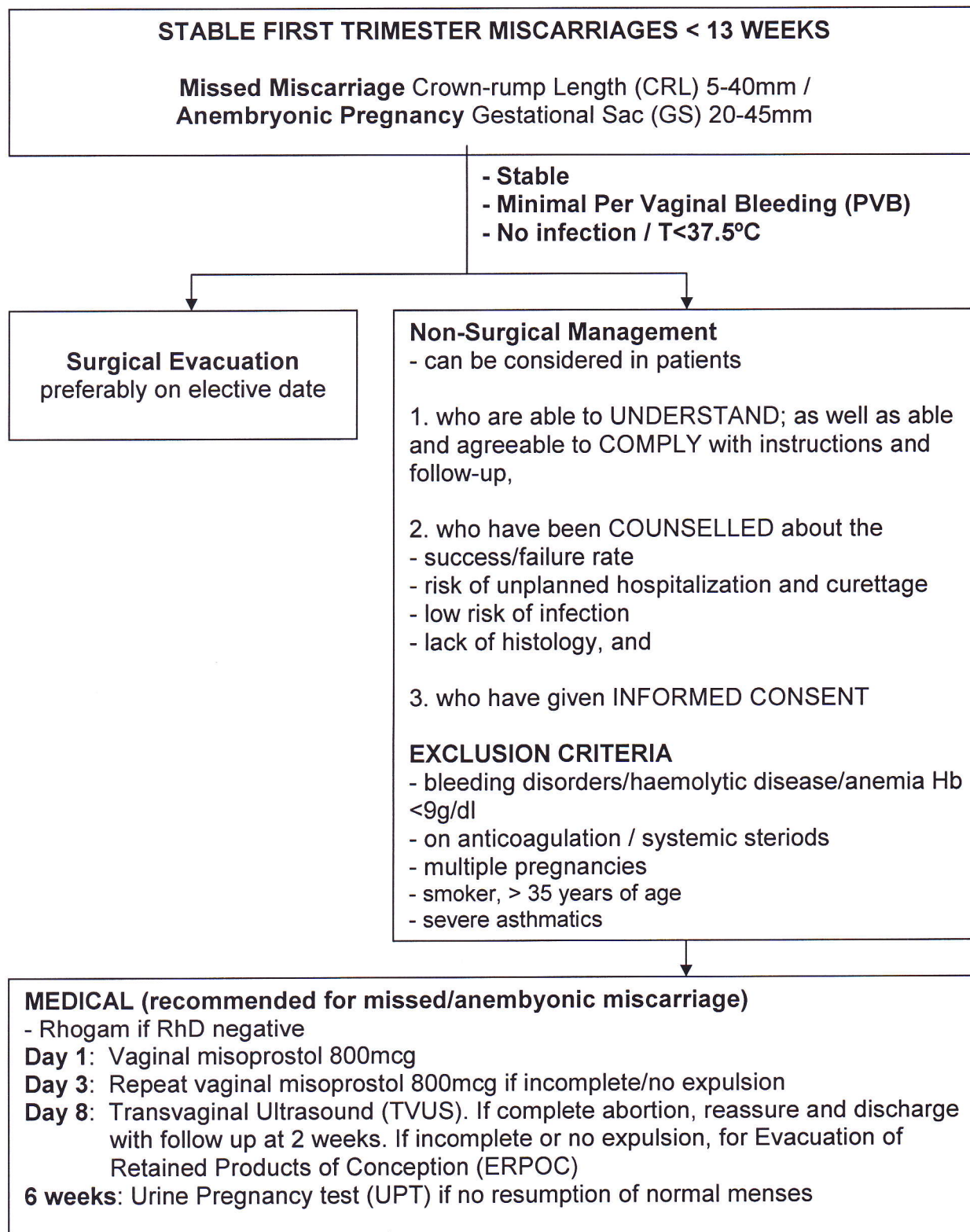
1.5 Maintenance treatment after threatened preterm labour

Maintenance tocolysis is not recommended for routine practice

1.6 Care after tocolysis

- Bed rest for 24-48 hours after infusion and discharged after 72 hours, of no contractions
- Vital signs / FHR and uterine activity are done hourly for 6-12 hours
- If patient goes into labour, to discuss with the neonatologist regarding possibility of delivery

2 DOSING GUIDELINES FOR THE USE OF MISOPROSTOL 200MCG TABLET IN THE MANAGEMENT OF STABLE FIRST TRIMESTER MISCARRIAGES < 13 WEEKS



3 REFERENCE

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