

Together Achieving Millennium Development Goals 4 & 5 by 2015

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The Millennium Development Goals Report 2014 (Source : United Nations)

Fourteen years ago, the Millennium Declaration articulated a bold vision and established concrete targets for improving the existence of many and for saving the lives of those threatened by disease and hunger. There has been important progress across all goals, with some targets already having been met well ahead of the 2015 deadline. All stakeholders will have to intensify and focus their efforts on the areas where advancement has been too slow and has not reached all.

Child mortality has been almost halved, but more progress is needed. Worldwide, the mortality rate for children under age five dropped almost 50 per cent, from 90 deaths per 1,000 live births in 1990 to 48 in 2012. Preventable diseases are the main causes of under-five deaths and appropriate actions need to be taken to address them.

Much more needs to be done to reduce **maternal mortality**. Globally, the maternal mortality ratio dropped by 45 per cent between 1990 and 2013, from 380 to 210 deaths per 100,000 live births. Worldwide, almost 300,000 women died in 2013 from causes related to pregnancy and childbirth. Maternal death is mostly preventable and much more needs to be done to provide care to pregnant women.

Quick facts on MDG 4 (globally)

- ◆ The child mortality rate has almost halved since 1990; 6 million fewer children died in 2012 than in 1990.
- ◆ 4 out of every 5 deaths of children under age five continue to occur in sub-Saharan Africa and Southern Asia.
- ◆ Immunization against measles helped prevent nearly 14 million deaths between 2000 and 2012.

◆ During the period from 2005 to 2012, the annual rate of reduction in under 5 mortality was more than 3 times faster than between 1990 and 1995.

(Source : WHO)

Quick facts on MDG 5 (globally)

- ◆ Almost 300,000 women died globally in 2013 from causes related to pregnancy and childbirth.
- ◆ The proportion of deliveries in developing regions attended by skilled health personnel rose from 56 to 68 per cent between 1990 and 2012.
- ◆ In 2012, 40 million births in developing regions were not attended by skilled health personnel, and over 32 million of those births occurred in rural areas.
- ◆ 52 per cent of pregnant women had four or more antenatal care visits during pregnancy in 2012, an increase from 37 per cent in 1990.

(Source : WHO)



Quick facts on Selangor Performance Jan-June 2014 MDG 4

- ◆ 435 under 5 mortality cases were reported.
- ◆ Classification of death :
 - 31 cases preventable
 - 323 cases unpreventable
 - 28 cases undetermined

Quick facts on Selangor Performance Jan-June 2014 MDG 5

- ◆ 24 maternal mortality cases were reported.
- ◆ Classification of death :
 - 10 cases preventable
 - 11 cases unpreventable
 - 3 cases undetermined

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MDG 5 : A CASE ILLUSTRATION : PREGNANCY OF UNKNOWN LOCATION (PUL)

CASE SUMMARY

A 36 year old housewife, G2P0+1 at 7 weeks POA presented to a private O&G specialist following a positive UPT at 5 weeks POA. A trans-abdominal scan (TAS) revealed an anteverted normal sized uterus. The endometrium was thickened with no intrauterine gestational sac. There was no adnexal mass noted. A diagnosis of early pregnancy with wrong dates was made and she was advised for a repeat ultrasound scan two weeks later.

She was booked at a government health clinic two days later by a Community Nurse. The patient was asymptomatic with normal vital signs. Routine screening blood investigations were taken with a planned medical examination during the next visit.

However, 5 days later the patient was found dead on the floor at home by her husband on returning from work. She had not complained of any symptoms nor had she contacted her husband for help earlier that day. A post mortem was done and revealed severe pallor with haemoperitoneum of 2.5 litres. There was a ruptured right tubal pregnancy.



Cause of death: Ruptured right tubal (ectopic) pregnancy.

CASE DISCUSSION

The above patient had a TAS at 7 weeks POA which revealed an empty, normal size uterus with no adnexal mass. Scanning at this gestation should reveal an intrauterine gestational sac with or without a fetal echo or evidence suggestive of an ectopic pregnancy such as an adnexal mass or free fluid in the POD.

In this case a diagnosis of early pregnancy with wrong dates was made. The patient was however sure of dates and had a positive UPT two weeks earlier. The initial assessment of this patient by a gynaecologist should have included a trans-vaginal scan (TVS). If the TVS was also negative for both intra and extrauterine pregnancy, the patient should have been managed as a case of “pregnancy of unknown location (PUL)” in conjunction with serum beta hCG monitoring.

Subsequent management of this patient should have been guided by the discriminatory and doubling time of the serum beta hCG levels (1) (See Figure A as below). Adherence to this management plan could have prevented this mortality.

The term “pregnancy of unknown location” is used whenever there is no sign of either intra or extrauterine pregnancy or retained products of conception on TVS despite a positive UPT (1). PUL is on the rise due to easy access to UPTs, better availability of ultrasound scans and increased anxiety of the patient to confirm a pregnancy after missing the next normal menstrual cycle. The outcome of PUL can be a continuation of a normal pregnancy, a failing pregnancy, ectopic pregnancy or a persistent pregnancy of unknown location (3).

TVS should be an essential part of early pregnancy evaluation: this tool is readily available both within the public and private specialist practices as well as at many GP clinics. Health personnel can easily be trained to perform TVS. Even with expert use of TVS, it may not be possible to confirm if a pregnancy is intrauterine or extrauterine in 8-31% of cases at the first visit. These women should be classified as having a “pregnancy of unknown location” (2).

Serial serum beta hCG levels are useful in determining the location of early pregnancy; approximately 70% of women with an ectopic pregnancy will have a rise in hCG that is slower than the minimum for normal pregnancy or a fall that is slower than the minimum for spontaneous miscarriage. However, 15% of normal pregnancies will have an abnormal doubling time (1). In combination, both TVS and serial beta hCG levels have a 93.5 – 100% positive detection rate (1). Patients who are being monitored with hCG levels should be admitted or at least seen every 48 hours.

A **HIGH INDEX OF SUSPICION** is necessary in all cases before the diagnosis of “**EARLY PREGNANCY – REPEAT SCAN IN 2 WEEKS**” is made.

SITES OF ECTOPIC PREGNANCY

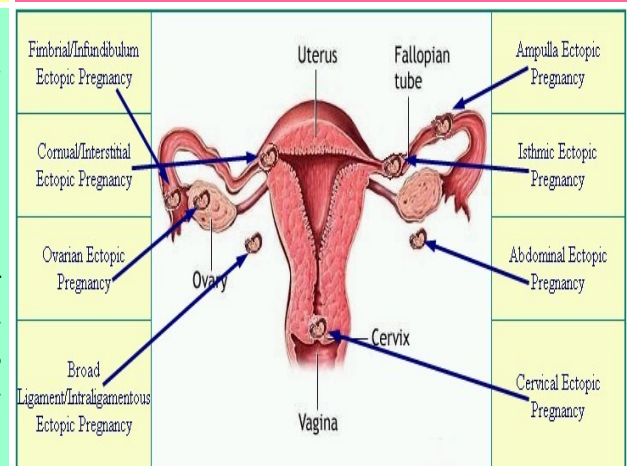
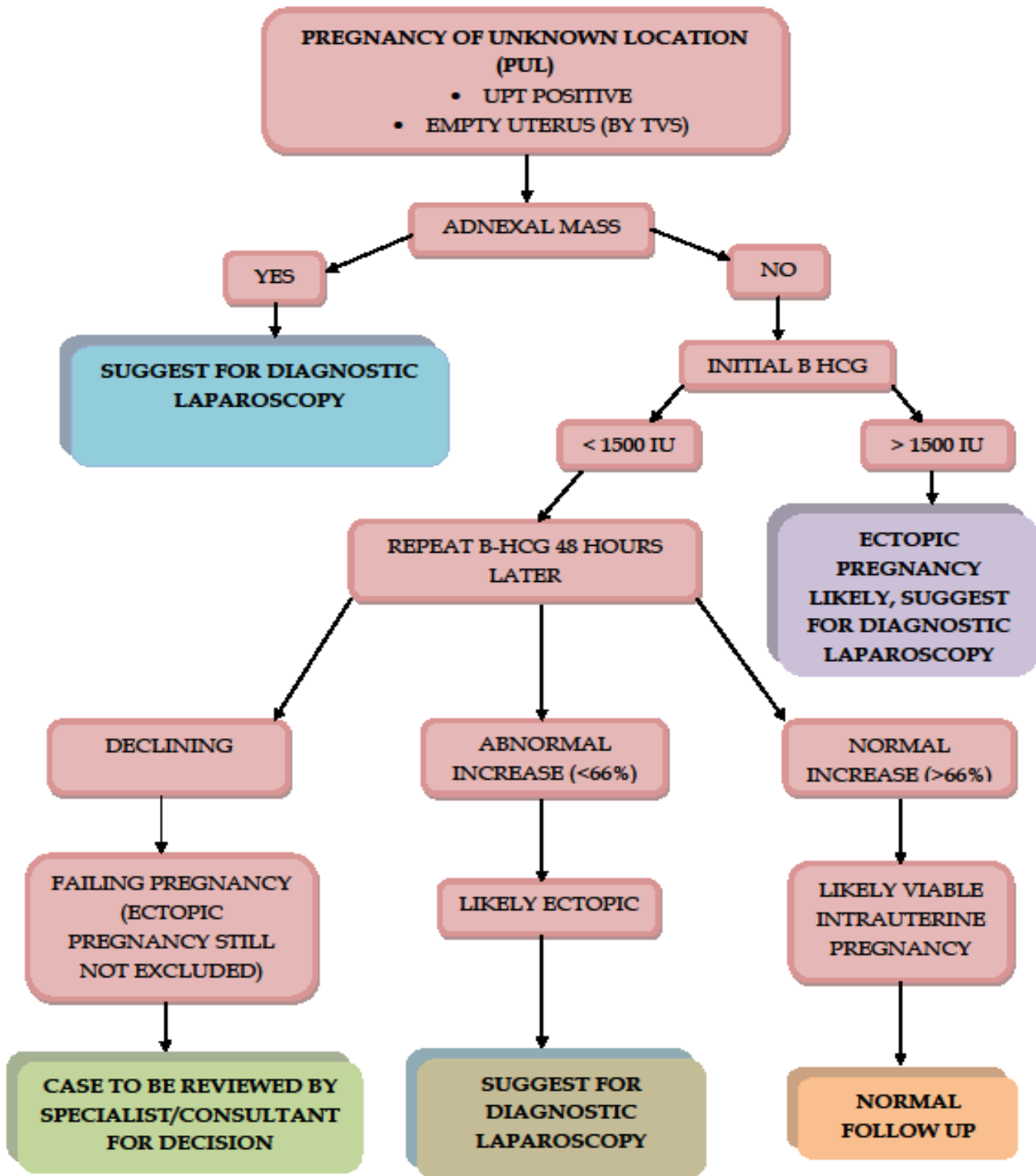


FIGURE A: ALGORITHM FOR MANAGEMENT OF PREGNANCY OF UNKNOWN LOCATION



REFERENCES

1. Review Pregnancy of Unknown Location: an evidence based approach to management, *The Obstetrician & Gynaecologist*, 2008 10:224-230
2. The Management of Early Pregnancy Loss, Green-top Guidelines 25, October 2006, Royal College Of Obstetricians & Gynaecologists.

MDG 4 : ACUTE GASTROENTERITIS WITH DEHYDRATION



MDG 4 - Reduce Child Mortality

“together we can save children's lives”

SIGNS OF DEHYDRATION



Acute diarrhea is the second most important cause of childhood mortality worldwide. It is estimated that each year, approximately 1.9 million children younger than 5 years of age dies of acute diarrhea. At present, there is no detailed epidemiological study on the burden of acute diarrhea in children from Malaysia. However, it was estimated that 1.3 % of all medically certified and uncertified deaths (or 69 deaths per year) among children younger than 5 years of age were due to acute gastroenteritis.

The main causes of childhood AGE are various enteric viruses and bacteria, although parasites are important in certain specific setting. Various studies, based mainly on hospital admission studies, showed that rotavirus is the most common cause of dehydrating diarrhea in young children requiring hospital care in Malaysia. Important bacterial pathogens include non-typhoidal Salmonella and E. Coli.

Proper clinical assessment is required to correctly diagnose the condition, in particular the severity of dehydration of the child, to provide the appropriate management. Every child with AGE should be carefully assessed for dehydration and other complications.

Criteria for hospital care include moderate to severe dehydration, persistent vomiting or worsening diarrhea even in the absence of dehydration, uncertainty about diagnosis, presence of unfavourable socio-economic factors, or presence of other complications.

In most cases of uncomplicated acute diarrhea with no significant dehydration, no laboratory investigation is necessary. A careful history and detailed physical examination to assess the state of hydration is often all that is necessary.

In most instances, with uncomplicated AGE, oral rehydration therapy is the treatment of choice and is sufficient in a majority of cases. Drug therapy is unnecessary in most cases, and may even be contraindicated or dangerous.

Children who require rehydration should continue to be breast fed or formula fed. Breastfeeding is the best measure for the prevention of AGE in young infants.

When the duration of diarrhea persists more than 14 days following an episode of AGE, lactose intolerance and food protein allergy should be excluded and consultation with a pediatrician should be considered.

Reference :

1. Guideline on the Management of Acute Diarrhea in Children 2011 by College of Pediatrics, Academy of Medicine of Malaysia and Malaysian Pediatric Association

6 WARNING SIGNS TO PARENTS

- Decreased frequency of urination or fewer wet diapers



- No/few tears when the child cries



- Dry mouth or tongue



Signs of severe dehydration :

- Overly sleepy (less than normal activity)



- Irritability (more crying, fussiness)



- Sunken eyes

