

IMOET National Meeting
Tuesday 30th September 2014
Dublin Castle

Standardisation of multidisciplinary obstetric emergency training nationally.

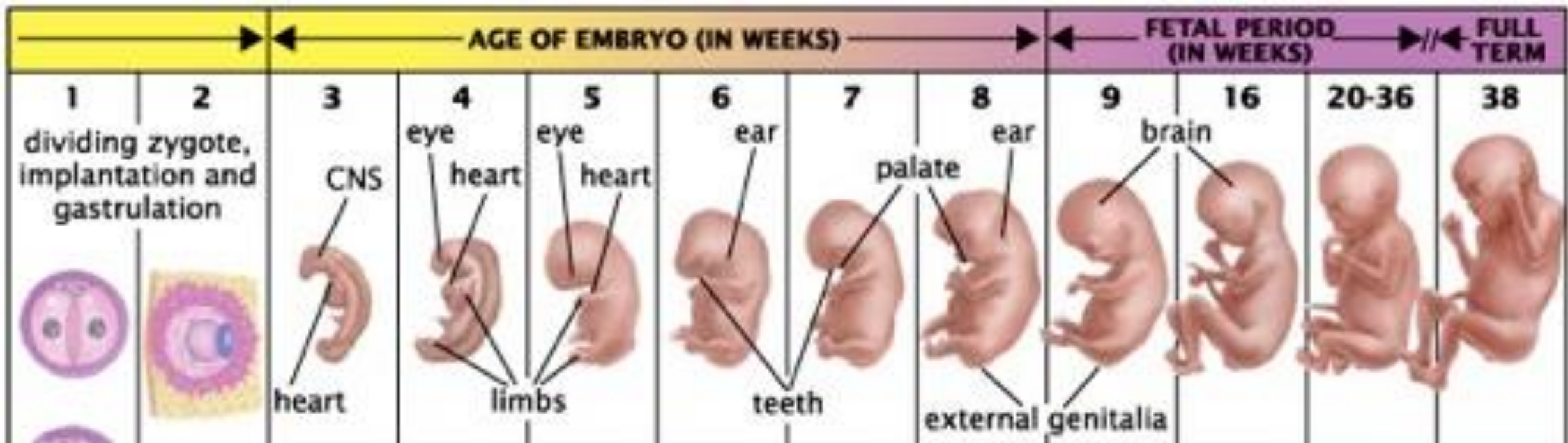
Early Pregnancy Vaginal Bleeding

Michael Gannon


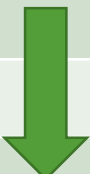
MRH Mullingar

- Guideline No. 1 Ultrasound diagnosis of early pregnancy miscarriage Dr Peter McParland
- Guideline No. 10 Management of early pregnancy miscarriage Dr Nadine Farah
- Guideline No. X The diagnosis and management of ectopic pregnancy Dr Michael Gannon

Early pregnancy development



Early pregnancy development

week	stage	transvaginal ultrasound	MSD	CRL	
1	0				
2	0				
3	implantation				
4	I	eccentric sac	2		 Miscarriage
5	pre-embryo	yolk sac	5		
6	embryo	embryo cardiac activity		2	
7	I		20	9	 Scan
8	I				
9	I				
10	fetus			30	



Limitations of gestational age measurement

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KEYWORDS:

ABSTRACT

Objectives The aim of this study was to determine the mean gestational age at the time of miscarriage and to compare this with the mean gestational age at the time of elective termination of pregnancy. We also aimed to determine the accuracy of the ultrasound measurement of the gestational sac diameter (MSD) in the diagnosis of miscarriage.

Methods This was a retrospective study of 100 women who had a miscarriage or an elective termination of pregnancy. Data were collected from the medical records and compared with the predefined protocol.

Addendum to GTG No 25 (Oct 2006): [The Management of Early Pregnancy Loss](#)

Recent research suggests that given inter-observer variability in ultrasound measurements and the greater variation in early embryonic growth than has hitherto been assumed, a more conservative approach to the diagnosis of early pregnancy loss is warranted.

The studies from Imperial College London, Queen Mary, University of London and the Katholieke Universiteit Leuven, Belgium published in the November 2011 issue of *Ultrasound in Obstetrics and Gynaecology* concluded that current definitions used to diagnose miscarriage could lead to an incorrect diagnosis and they call for clearer evidence-based guidance on detecting miscarriage through ultrasound scans.

Having carefully considered these papers, we recommend adoption of the following interim guidance **with immediate effect**:

1. Ultrasound diagnosis of miscarriage should only be considered with a mean gestation sac diameter ≥ 25 mm (with no obvious yolk sac), or with a fetal pole with crown rump length ≥ 7 mm (the latter without evidence of fetal heart activity)
2. A transvaginal ultrasound scan should be performed in all cases
3. Where there is any doubt about the diagnosis and/or a woman requests a repeat scan, this should be performed at an interval of at least one week from the initial scan before medical or surgical measures are undertaken for uterine evacuation. No growth in gestation sac size or CRL is strongly suggestive of a non-viable pregnancy in the absence of embryonic structures.



Royal College of
Obstetricians and Gynaecologists

Bringing to life the best in women's health care

Ectopic pregnancy and miscarriage: Diagnosis and initial management in early pregnancy of ectopic pregnancy and miscarriage

December 2012

NICE Clinical Guideline

NICE - diagnosis

- Support and information giving
- EPU (7 days) self ref for recurrent miscarriage, previous ectopic or molar
- Symptoms and signs of EP and initial assessment
 - Pain and/or >6 wks: EPU Painless bleeding <6 wks: expectant
- TVS
- hCG (not progesterone) in women with PUL

NICE - management

- Expectant management for 7-14 days first line strategy for miscarriage
- Medical if expectant not acceptable
- Surgical choice of vacuum aspiration under LA or surgery in theatre under GA
- Laparoscopy for EP
- Salpingectomy unless infertility

Early Pregnancy Unit

- All maternity units have a dedicated EPU
- Direct access for GPs and selected patient groups
- Trained sonographer with TV scanning
- Senior obstetrician available during each session
- Written information provided
- Monitored by HSE Clinical Care Programme

Early diagnosis of miscarriage

- CRL >7mm with no heart activity on TVS
- MSD >20mm with no yolk sac or embryo on TVS
 - Guideline No. 1 (2010)
- CRL \geq 7mm with no heart activity on TVS
- MSD \geq 25mm with no yolk sac or embryo on TVS
 - Guideline No. 10 (2012)

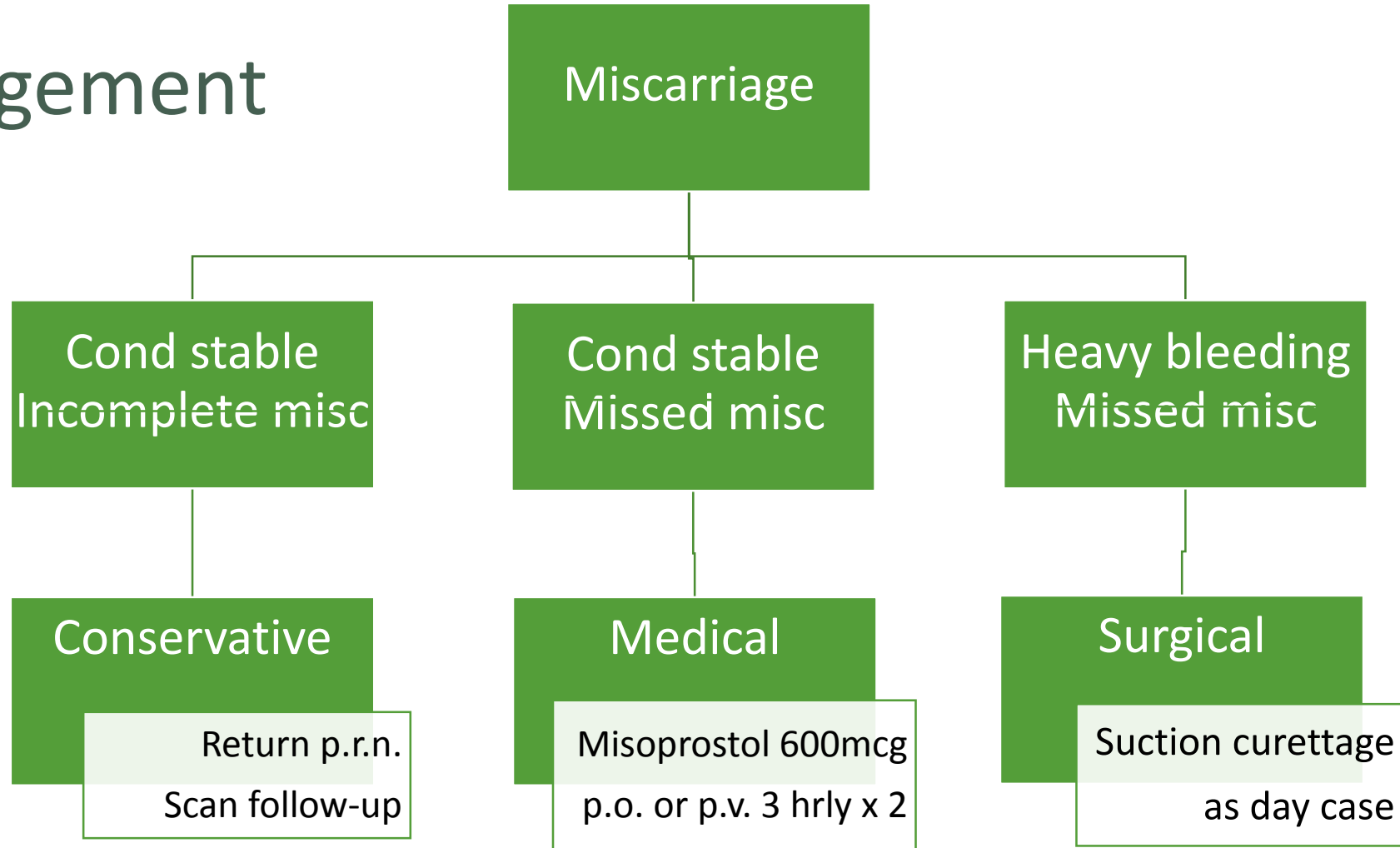
Should we consider a second scan?

- Doubt about diagnosis
 - First scan before 8 weeks
 - Unskilled / out-of-hours / TA scan / obese
 - Long cycle, asymptomatic woman
 - Guideline No. 10 (2012)

NICE guideline (2012):
Second scan 1 week if CRL <7mm
Second opinion and/or scan 1 week if CRL \geq 7mm

- Woman's request if unconvinced or not ready for diagnosis

Management



hCG and progesterone at every visit

(as used at Mullingar)

- Immediate indication of viability
- Confirms scan findings
- Confirmation of complete miscarriage (vs ectopic)
- No restriction on early attendance
- Outpatient management of suspected ectopic

Batching of
bloods
easier for
laboratory

Ectopic Pregnancy

- Women in A&E should have urinary pregnancy test
- TVS in EPU best for diagnosis
- Beware of discriminatory zone
- Expectant management good for small mass and falling hCG
- Medical (methotexate) for mass <35mm and hCG <1500IU/L
- Laparoscopic salpingotomy OR salpingectomy

Resources

- Emergency room assessment - dedicated Obgyn facility
- Review EPU setup & staffing particularly nursing
- Time for a second national round of scan machines

Communication

- Set up a national association of EPU's
- 19 EPU's in Ireland
- Over 200 EPU's in UK



The Association of Early Pregnancy Units

Early Pregnancy Information Centre

Early Pregnancy Units in Ireland

Altnagelvin Area Hospital

Glenshane Road
Londonderry, Ireland
BT47 6SB

Clinic Times: Mon-Fri 14:00-16:30
Referral: GPs, midwives

Tel: (028) 71611204

Kerry General Hospital

Tralee
County Kerry, Republic of Ireland

Clinic Times: Mon-Fri 08:30-10:00, weekends 10:30-11:00
Referral: GP, midwife

Tel: 066 7184123

Letterkenny General Hospital

Letterkenny
County Donegal, Republic of Ireland

Clinic Times: Mon-Fri 11:00-14:00
Referral: GPs, midwives, occasional self referral

Tel: 074 9123566

Rotunda Hospital

Parnell Square
Dublin 1

Clinic Times: Mon-Fri 07:50-12:20
Referral: Health professionals, self referral for existing patients

Tel: 018171700 Fax: 018176873

Royal Jubilee Maternity Hospital

Grosvenor Road
Belfast
BT12 6BA

Clinic Times: Mon-Wed 08:45-12:45
Referral: GP / Midwife /Admission unit /self

Tel: (028) 90632303 Fax: (028) 90633151

South West Acute Hospital

124 Irvinestown Road
Enniskillen, Co. Fermanagh
BT74 6DN

Clinic Times: Mon-Fri 09:00-17:00
Referral: A&E/GP/Midwife/Self

Tel: (028) 66382609 Fax: 028 66382254

Ulster Hospital

Maaly Ward, Upper Newtownards Road
Dundonald, Belfast
BT16 1RH

Clinic Times: Mon-Fri 09:30-11:30
Referral: Health professionals

Tel: (028) 90550453

Wexford General Hospital

Wexford Town
Wexford, Ireland

Clinic Times: Mon-Fri 08:30-13:00
Referral: Health professionals

Tel: 053 9153106 Fax: 053 9153046

Quality standards and improvement

- Clinical research through EPU network
- Place of hCG & progesterone in diagnosis
- Promote conservative management of miscarriage
- Availability of same day surgery
- Explore option of ERPC (SMM) under LA

Looking forward

EPU

VS

A&E

Hospital admission

Delayed scanning



Staff &
resources

