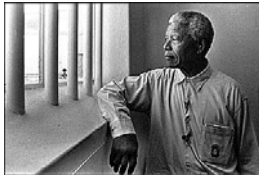


The value of EARLY PREGNANCY CLINICS ESHRE 2008

on behalf of ESHRE Special Interest Group for Early
Pregnancy (SIGEP)
Roy Farquharson UK Chair
Ole Christiansen DK Deputee
Niek Exalto NL Deputee
Eric Jauniaux UK Past Chair
Jose Horcajadas ES Deputee

The Patient's Journey



- "It is always a good thing to walk a mile in another man's shoes"
- Nelson Mandela

Long Walk to Freedom The view from Robben Island Prison

What does an Early Pregnancy Clinic/Unit do?

- All early pregnancy problems are seen by a multidisciplinary team in a dedicated area with easy access and good quality scan and laboratory backup
- Triage Assessment of pregnancy problem PUL/viability/ectopic/hyperemesis/molar
- Construction of Management Plan for Medical/Surgical/Conservative options
- Treatment & Surveillance of EP loss/failedPUL/ectopic/molar pregnancy

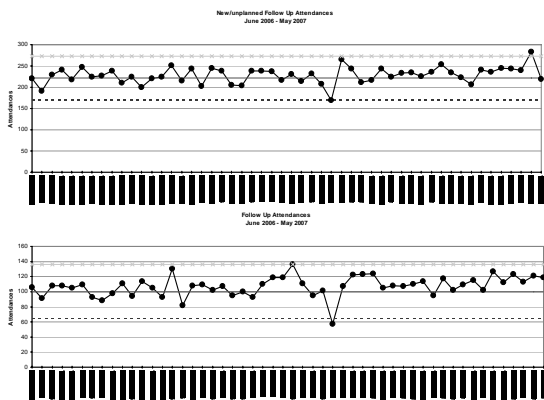
Ethos of Care

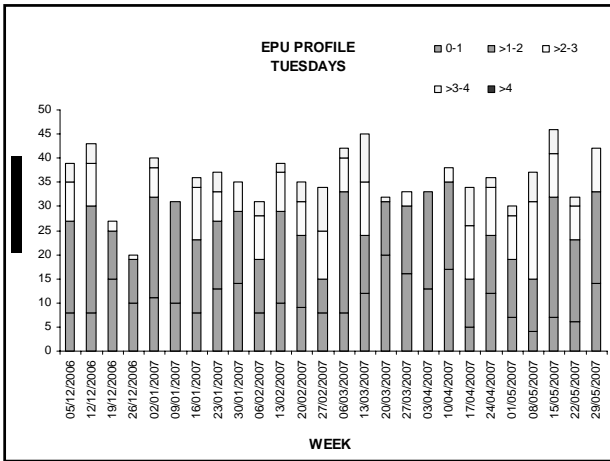
- Patient Centred – changing the ‘culture’ allowing prompt access; nurse specialist delivery; high quality 7/7 ultrasound
- At all times women will be supported in making informed choices about their care and management. efficient management, patient counselling and access to appropriate information.
- Standard Setting (RCOG and NICE) – harmonise care delivery
- Protocol and Guideline development (website: earlypregnancy.org.uk/guidelines)

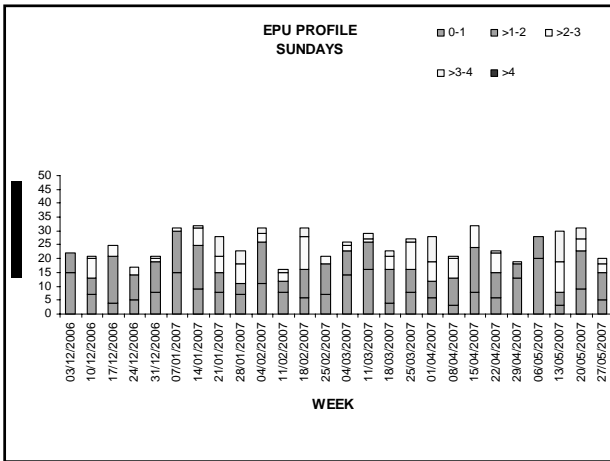
Early Pregnancy

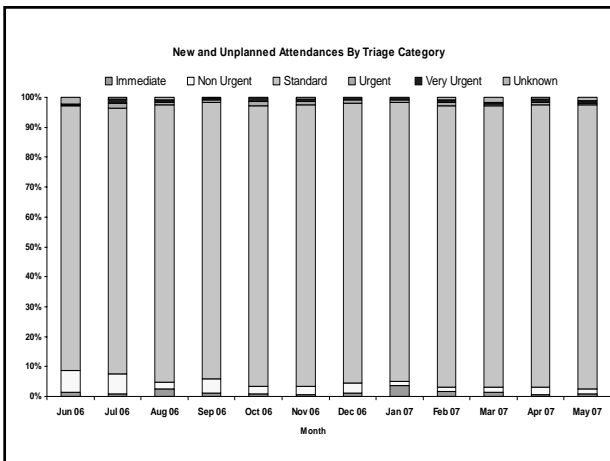
- **Continuous vigilance for the commonest ‘killers’ in early pregnancy (CEMACH 2007):**
- **ECTOPIC PREGNANCY**
- **THROMBOEMBOLIC DISEASE**



How Many are Attending (weekly)?









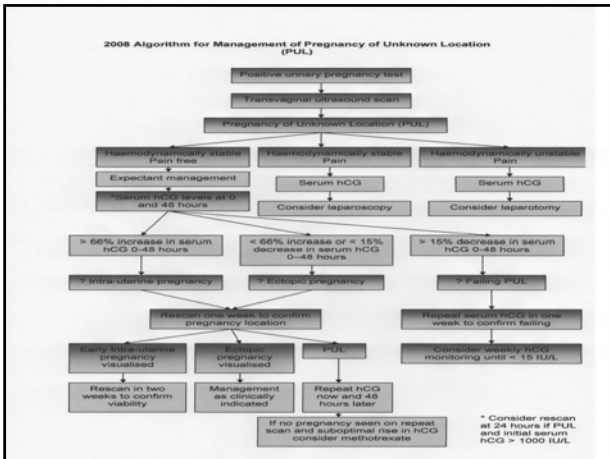



Standards in Early Pregnancy Care
AEPU/RCOG Joint Document (2007)
DRAFT
 RCOG Tahir Mahmood, Chair, Working Party on Clinical Standards
 AEPU Roy Farquharson, Chairman, Association of Early Pregnancy Units
 Lesley Regan, Hon President, AEPU

Standard	Core	Aspirational
Patient Information	Designated Reception Area Universal use of clear, understandable terminology by all staff	Dedicated staff constantly at reception desk to provide greeting, obtain patient details and explain structure and triage function of EPU
Patient Choice in Management	Education of patient relevant to diagnosis and management Open explanation of expectant, medical and surgical options	Dedicated phone line for patient queries and electronic access to protocols from outside unit
Dedicated Quiet Room	Room for breaking bad news away from work area	Single-use room only with soft furnishing and absence of medical equipment
Availability of Service	5 day opening during office hours	7/24 opening and service provision with full staffing and daily scan support
Competence of Scanning	Recognised ultrasound training and RCOG/BMUS preceptor assessment and validation Register of staff competent at scanning	Lead Clinician Presence of RCOG/BMUS trainer in EPU Annual assessment of audited activity
Blood HCG level measurement	Laboratory access to blood HCG measurement and result within 48 hours of sampling	Same day sampling and result with electronic result link to laboratory
Written Information Leaflets	Visible open access to written information leaflets in EPU	Online external access to PIL
Acknowledgment of Privacy and Dignity	To provide individualised patient support and acknowledge confidentiality	Place one to one care as best practice at all times
Bereavement Counselling	All staff trained in emotional aspects of early pregnancy loss To enable access to counselling and provide immediate support	To provide all emotional and psychological counselling requirements within EPU and supported by dedicated staff and related agencies
Site of EPU	Geographically separate from all maternity services	Open EPU entrance/exit

EPU Setting Standards 2007

- Auditable Standards**
- The EPU should benchmark all audited activity against published observational series and adopt all evidence based practice (EBP) recommendations for diagnosis and management of early pregnancy problems.
- Patient satisfaction surveys of Early Pregnancy Unit service
- Ruptured ectopic pregnancy number and failed diagnosis rate per year following opportunity for diagnosis in EPU.
- False diagnosis rate for fetal loss in early pregnancy ultrasound assessment
- Audit of patient choice and uptake rates of medical/surgical/conservative management of miscarriage and ectopic pregnancy and their complication rates.
- Assessment of training and educational opportunities for EPU staff including medical trainees and nurses.
- Audit of pregnancy of unknown location (PUL) outcome following EPU assessment and benchmarking against peer review published standards
- Appropriate use of anti-D prophylaxis
- Analysis of patient visits and HCG requests prior to establish confirmed diagnosis
- Audit of anti-chlamydia treatment uptake, compliance and provision following pregnancy loss
- Standards of documentation



**Liverpool Women's Hospital
EPU/ER to 31/3/07**

- Annual patient attendance = 17,081
- 11,688 new, 5393 follow-ups
- 99.95% seen within 4 hours
- Emergency admissions = 1691 patients
- Approximately 50% are early pregnancy problems

**Audit of Ectopic Pregnancy 2006 (n=119)
Liverpool Women's Hospital UK**

Laparoscopic Management	~60%	RCOG Standard >80%	Endoloop Ligasure
Laparoscopy then Laparotomy	4		
Medical Management	38	with Methotrexate	Failures x 1
Negative Laparoscopy	2		

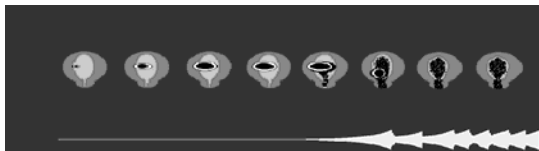
EPU Inherited Thrombophilia Tests UK Survey 2008

- 70% response rate (115/164 EPU's) in UK
- Heritable Thrombophilias (eg FVL, Prot C, S) tested for with late miscarriage (80%), recurrent miscarriage (76%) and placental abruption (88%)
- Highly variable range of tests which frequently led to heparin/aspirin administration in next pregnancy
- Evidence based practice inconsistent

What can an EPU Team do?

- After conception to after viability
- Design diagnostic and treatment algorithms
- Provision of accurate patient information and get feedback from patients
- Assessment plus Treatment - EPU more than EPAU
- Explain Timeline Sequence and Algorithms for pregnancy of unknown location (PUL), ectopic pregnancy, viability assessment
- Initiate relevant treatment if recurring miscarriage history
- Target milestone of seamless antenatal booking at 12 weeks

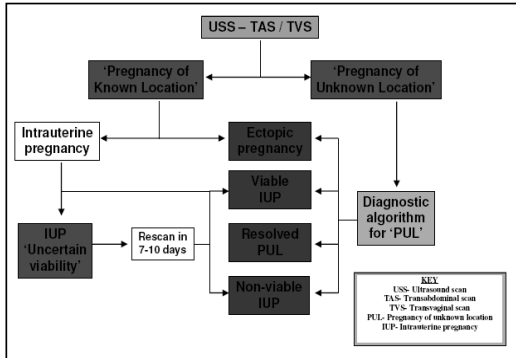
Commonest Complication of EP - Miscarriage



Timeline Sequence of Early Pregnancy Events

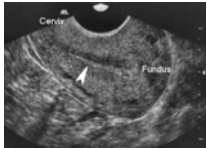


Basic diagnostic algorithm for early pregnancy loss



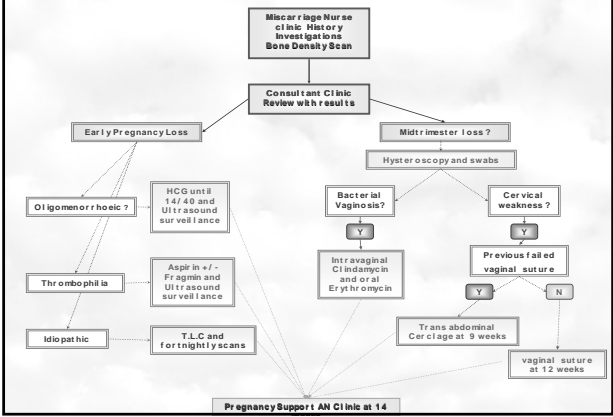
PUL

Placental Haematoma



- The unseen and seen problems of early pregnancy scans
- Time line analysis and prediction

Diagnostic & Treatment Pathway for Recurrent Miscarriage



Pregnancy Success Prediction Matrix

Following idiopathic RM, the predicted probability (%) of successful pregnancy is determined by age and previous miscarriage history (95% confidence interval <20% in bold).

Age (yrs)	Number of Previous Miscarriages			
	2	3	4	5
20	92	90	88	85
25	89	86	82	79
30	84	80	76	71
35	77	73	68	62
40	69	64	58	52
45	60	54	48	42

Brigham et al, Hum Rep, 1999, 14, 2868-2871

Cervical Length Measurement (CLM) and Funnelling

- Normal CLM circa 50mm



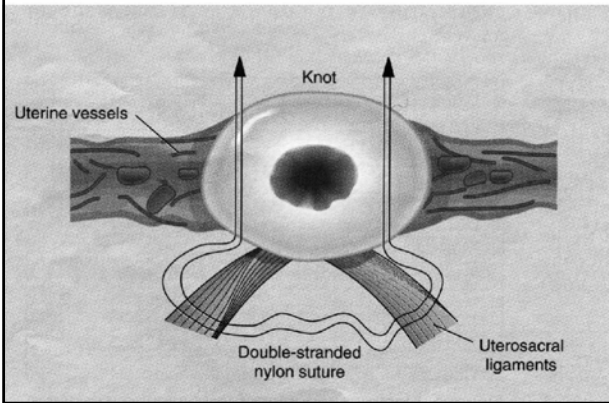
- Funnelling appears after 16 weeks if not before



TVU of Open Cervix at 16 weeks



Transabdominal Cerclage Technique



Specialist Interest Group for Early Pregnancy (SIGEP profile)

- Dissemination of Protocol
Updated and Revised Nomenclature for Early Pregnancy Events (Hum Rep, 2005, 20, 3008-11.)
- Evidence Based Practice
Guidelines for Investigation and treatment for recurring miscarriage (Hum Rep 2006, 21, 2216-22)
- Improving visibility of Early Pregnancy Unit network (earlypregnancy.org.uk)
- ESHRE SIGEP Website enhancement (earlypregnancy.com)

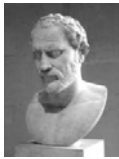
Future ESHRE SIGEP Activities (www.earlypregnancy.com)

- Annual Meeting Barcelona 2008
PreCongress Course on Early Pregnancy and ART on 6/7/08
- Winter Symposium 18/19th Dec 2008 Milan
Imaging and Early Pregnancy
 - ESHRE Amsterdam 2009
PreCongress Course - From Gamete to Heartbeat with Embryology SIG

New Ideas

- ESHRE Guidelines for **best practice** to be audited in EU countries especially new member states and core standard availability
- **Standard setting** for audit purposes to allow departmental bench marking between units and countries
- **Collaboration** with frontier research enabling fast track access to peer review & presentation
- **Risk prediction after early pregnancy complications** Outline review of subsequent pregnancy outcome following a history of EP complications

The opportunity for EP care



- 'A small opportunity can lead to great enterprise'
Demosthenes of Athens, 384-322 BC

Acknowledgements