St Mary's Maternity Services

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ST MARYS HOSPITAL
CLARENCE
MEMORIAL WING


ST MARY'S HOSPITAL
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St Mary's Hospital Guide
alamy stock photo


passing a football.

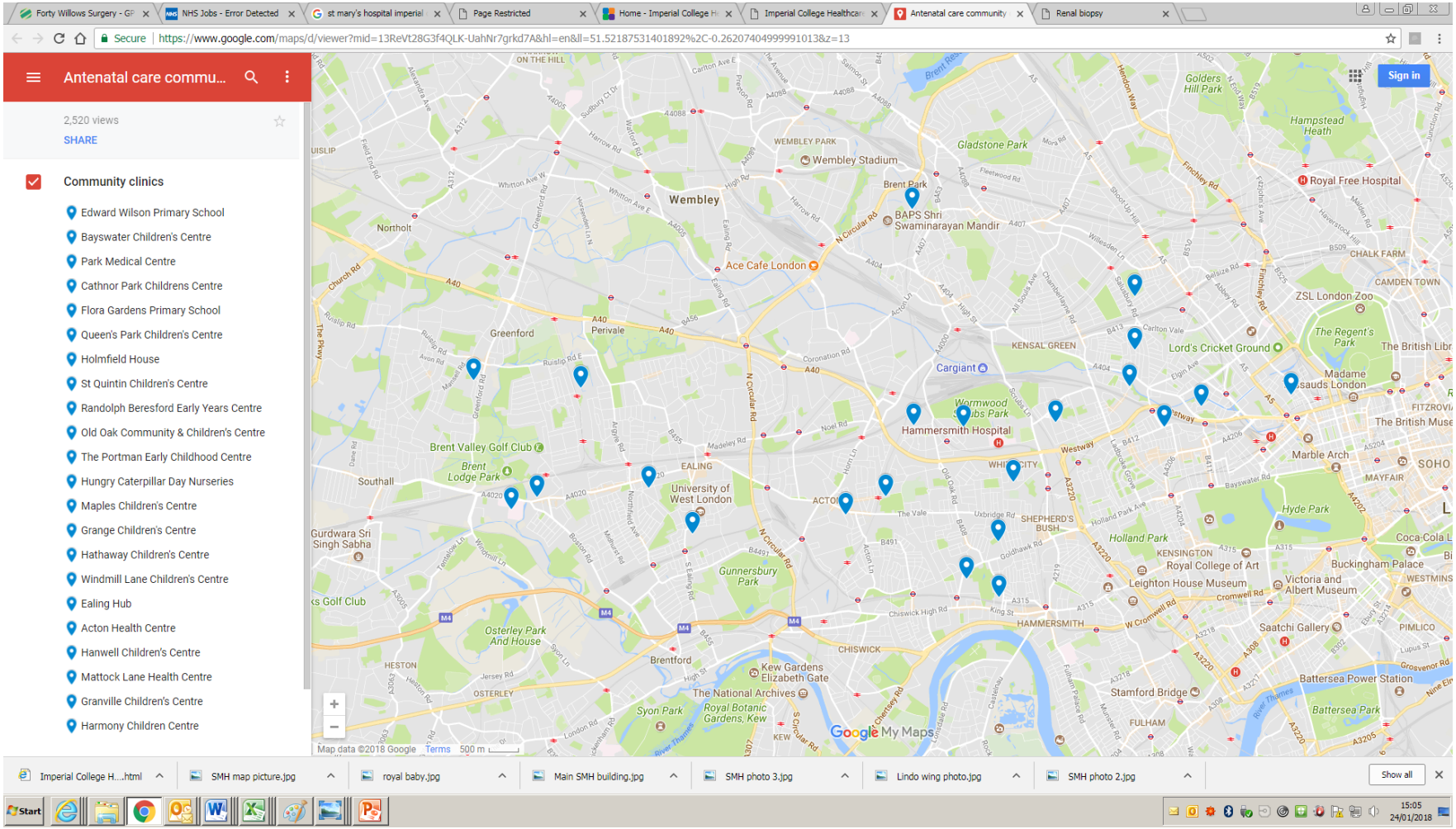

ST MARY'S

St Mary's Hospital

- The major acute hospital for north west London
- Runs one of four major trauma centres in London
- 24/7 A&E department
- Maternity unit and alongside Birth centre and home birth service
- Antenatal clinic, FMU, Maternity Day Assessment unit, Triage, 24/7 anaesthetics
- Level 2 Neonatology

Caring for our women and families

GP or self referral Community clinics



Caring for our women and families

- 60% of women have all appointments in community
- Out of area and high risk women are seen in antenatal clinic
- Core team of 8 obstetricians. Gynaecology on site
  - Fetal medicine specialists
  - Maternal medicine specialists – HIV/infectious diseases (Jefferiss Wing), Diabetes (Endocrinology team), Neurology, Haematology
  - Preterm labour clinic
  - Multiple pregnancy
  - Pelvic floor clinic

- Perinatal mental health team
  - Perinatal psychiatrist, perinatal mental health midwife, Lead obstetrician, IAPT service
- Bereavement clinic – specialist midwives and consultant lead
- Postnatal follow up clinic
- 'Blue team' – small group of caseload midwives looking after women with social complexity

Caring for our women and families

- **Antenatal education classes**
  - Parent Education Centre at St Mary's
    - Birth and Parenthood Preparation Classes
    - Breastfeeding
    - Infant massage

- King's midwifery students and Imperial College medical students

- GP trainees, clinical fellows, subspecialty trainees and specialty trainees

- **Maternity Day Assessment Unit** (0203 312 7707)
  - 8am-8pm Mon-Fri. Reduced fetal movements, Itching, BP checks,
- **Triage** – on LW
  - A&E for pregnancy. 24/7. ?Waters broken, early labour

Place of Birth

- Birthplace study
- Home birth – community teams
- 17% women give birth in our Birth centre
  - Birth preparation classes from 36 weeks
  - AN appts at 38,40 and 41 weeks
  - Fewer interventions, low CS/instrumental birth rates

Place of Birth

- Labour ward
  - Obstetricians, anaesthetists
  - 2 pools
  - Telemetry
  - 2 theatres
  - Recovery area and HDU
  - Bereavement room

Postnatal

- Enhanced Recovery for CS
- PICO dressings
- Discharge talk every day 11am
- Partners/support can stay
- Infant feeding supporters and specialist mws
- Physio input
- Easy referral back to MDAU- wounds, perineums, BP, bladder

Contact details

Imperial.obstetrics-stmarys@nhs.net

- Email for non urgent queries for St Mary's patients
- Consultant Obstetrician response within 2 working days

Updates in Maternity 2018

Hypertension - definitions

Chronic hypertension	Hypertension present at booking or before 20 weeks or if the woman is already taking antihypertensive medication when referred to maternity services. It can be primary or secondary in aetiology
Gestational hypertension	New hypertension presenting after 20 weeks without significant proteinuria
Mild hypertension	Diastolic blood pressure 90–99 mmHg; systolic blood pressure 140–149 mmHg
Moderate hypertension	Diastolic blood pressure 100–109 mmHg; systolic blood pressure 150–159 mmHg
Severe hypertension	Diastolic blood pressure 110 mmHg or greater; systolic blood pressure 160 mmHg or greater
Pre-eclampsia	New hypertension presenting after 20 weeks with significant proteinuria.
Severe pre-eclampsia	Pre-eclampsia with severe hypertension and/or with symptoms, and/or biochemical and/or haematological impairment
Significant proteinuria	Greater than 300mg/24 hours or >30mg/mmol

Pre-eclampsia: definition (ACOG Committee opinion, 2002)

New onset hypertension (>140/90) after 20 weeks

New onset proteinuria

> 1+ proteinuria on urine dipstick

>300mg/24 hours - 24° urine collection

Spot protein: creatinine ratio >30mg/mmol (in absence of UTI)

Biochemical abnormalities

Low platelets, deranged LFTs, deranged renal function, coagulopathy

IF CONCERN REGARDING PRE-ECLAMPSIA, BP >150/100, OR SYMPTOMATIC OF PET, PLEASE REFER URGENTLY TO DAU/ TRIAGE

Exceptions?

Pre-eclampsia – management of hypertension

Aim to keep BP <150/100 or <140/85 if evidence of end-organ disease (chronic hypertension, CKD etc)

Drug treatment options

Prophylaxis:

Low dose Aspirin; Calcium /Vitamin D

If high risk of Vitamin D deficiency, should check blood level and prescribe high dose replacement if necessary (eg. 20,000 IU cholecalciferol weekly for 4-8 weeks)

Antenatally:

Labetalol, Nifedipine (MR preparations), Amlodipine, Methyldopa, Doxazocin, Hydralazine (IV)

If patient is on ACEI or ARB prior to pregnancy, consider switching to one of the above agents pre-pregnancy or at positive pregnancy test at the latest

Postpartum:

Atenolol; Amlodipine, Nifedipine, Enalapril

Aim for once daily dosing if possible to facilitate compliance

Reduced Fetal Movements (RFM)

Reducing stillbirth is a priority for the NHS

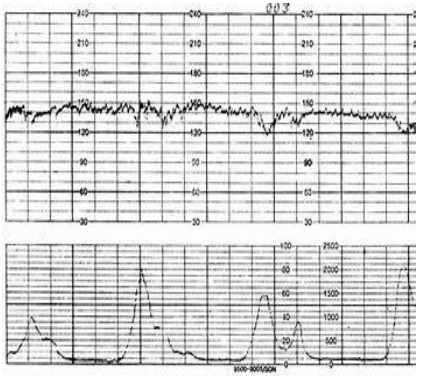
- Reducing stillbirth is a Mandate objective from the government to NHS England
- Better Births (February 2016) identified the 'Saving Babies Lives' care bundle as good practice in reducing stillbirths:
  - Reducing smoking in pregnancy
  - Risk assessment and surveillance for fetal growth restriction
  - Raising awareness of reduced fetal movement
  - Effective fetal monitoring during labour
- If patient is concerned regarding fetal movements >20 weeks, please refer woman to MDAU for assessment
- If RFM associated with abdominal pain and bleeding, consider calling an ambulance

Saving babies' lives – Care bundle (element 3)

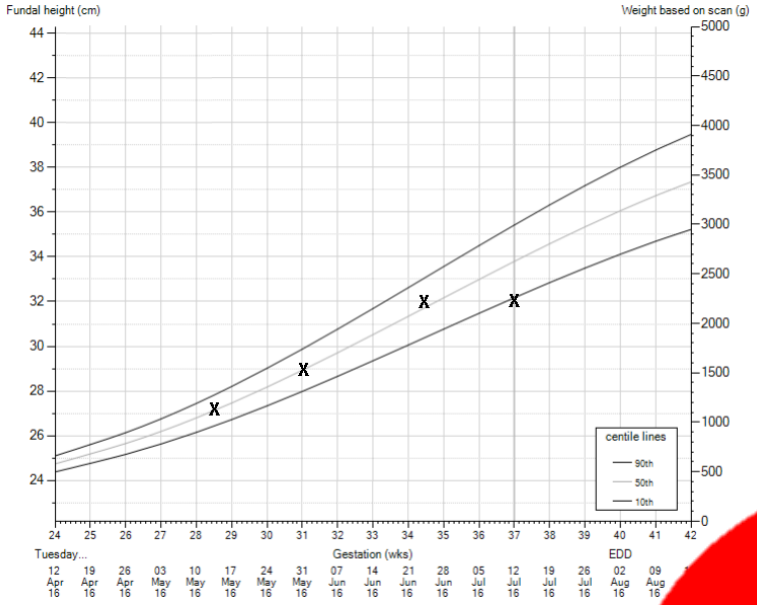
Reduced fetal movements

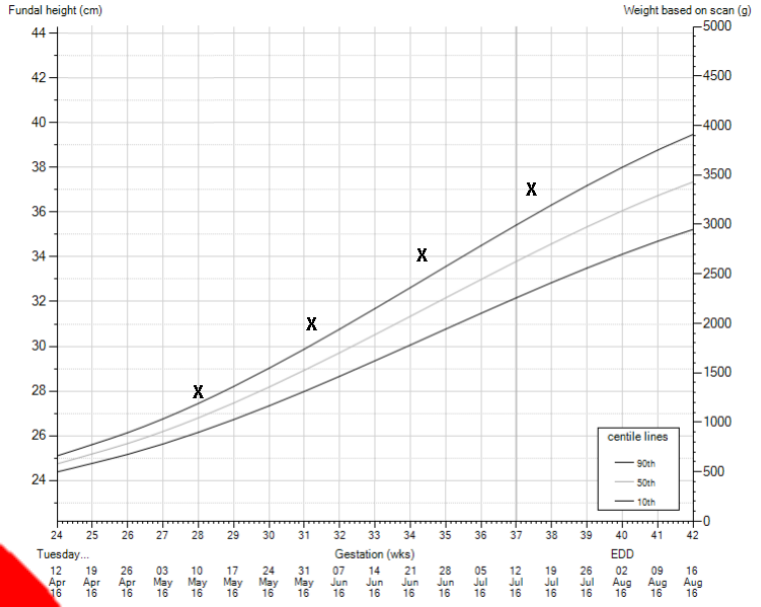
- Aspiration
  - Raising awareness amongst pregnant women of the importance of detecting and reporting reduced fetal movement (RFM), and ensuring providers have protocols in place, based on best available evidence, to manage RFM
- Interventions
  - Information and advice leaflet on reduced fetal movement (RFM), based on current evidence, best practice and clinical guidelines, to be provided to all pregnant women by, at the latest, the 24th week of pregnancy and RFM discussed at every subsequent contact
  - Use provided checklist to manage care of pregnant women who report reduced fetal movement, in line with RCOG Green-top Guideline 57

THE NHS



Growth Assessment Protocol (GAP)
DEtection of Small for GestatioNal Age Fetus (DESiGN Trial)





Place sticker here

Patient name

MRN Number

Ultrasound request Form to be used in Conjunction with Departmental Guideline

Imperial College Healthcare NHS
NHS Trust

Consultant

				Requester			Receptionist ONLY		
	Reason	Please tick √	Any Comments	Printed Name	Signature	Date	28weeks	32 weeks	36 weeks
Examination	**Within 3 working days - refer to SGA policy; discuss with CFC/FMU if urgent and no capacity in ultrasound department**			**MW / GP / Obstetrician to Request**			**Appointment date and time**		
	First SFH <10th centile								
	SFH static/slow growth								
	SFH excessive growth								
	Appointment to be booked at :			**MW / Obstetrician to Request**			**28 weeks**	**32 weeks**	**36 weeks**
Clinical History:	Smoker 10 + cigarettes per day								
	Current illicit drug user								
	BMI <18kg/m^2 or >40 kg/m^2								
	Heavy bleeding in 1st trimester similar to menses								
	Low PAPP-A <0.3MoM								
	Maternal age >40 years								
	Previous SGA baby (birth weight below 10th centile)								
	Previous stillbirth								
	Previous early-onset pre-eclampsia or IUGR requiring delivery <34 weeks		**Refer to FMU/CFC**						
	Previous late-onset pre-eclampsia >34 weeks								
	Chronic hypertension								
	Other medical conditions eg. Pre-existing diabetes, APS, SLE, chronic kidney disease, inflammatory bowel disease, gastric bypass, congenital cardiac disease, sickle cell disease, on anti-psychotic meds, etc…		**Obstetric Medicine or PNMH Consultants ONLY**						

Information

- Patient Information: Growth Charts and Screening for Small Babies https://www.imperial.nhs.uk/our-services/maternity-and-obstetrics/antenatal-care/patient-information
- Perinatal Institute www.perinatal.org.uk Examples of Growth Chart patterns

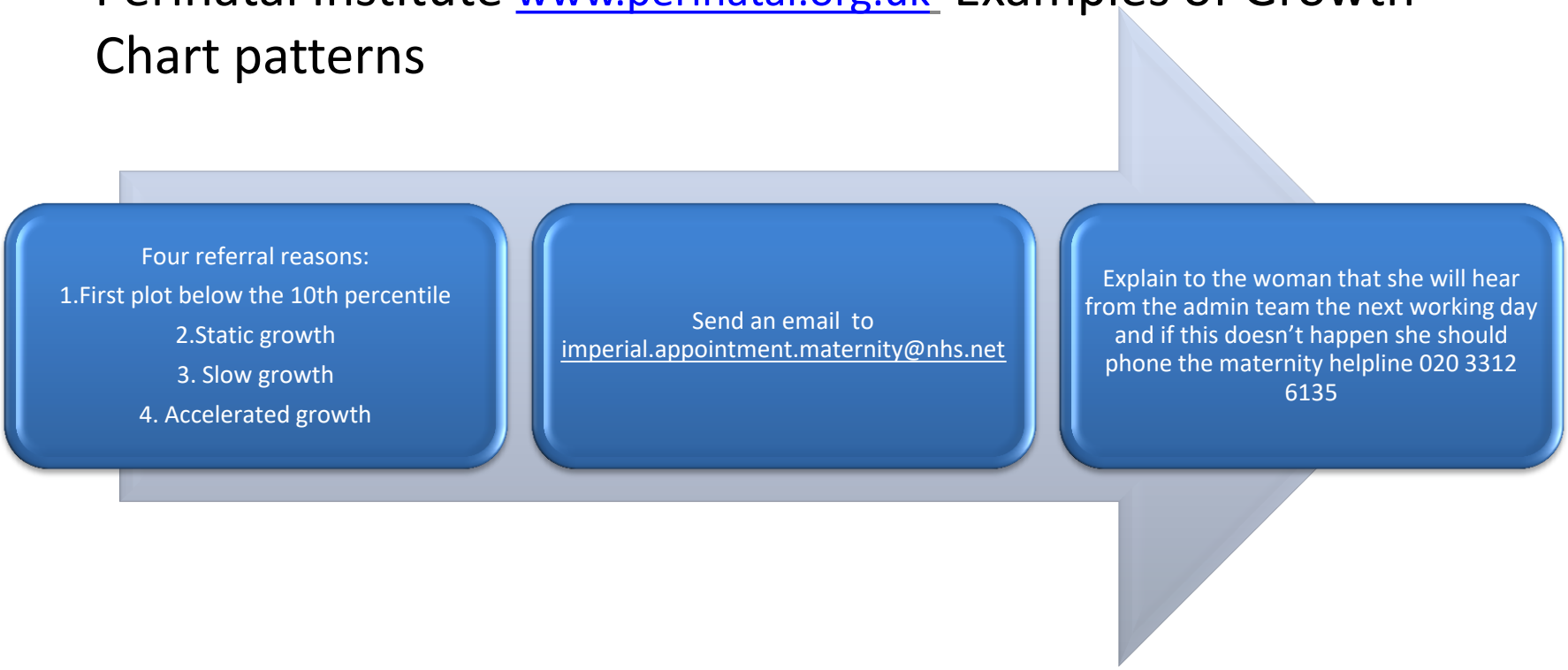


Figure 1: Imperial Maternity Thromboprophylaxis Antenatal Risk Assessment

Antenatal Assessment & Management: assess at booking and repeat on each admission

(tick box)	
Single previous VTE + • FHx or thrombophilia (inherited or APS) • Unprovoked/oestrogen/ pregnancy related	

→ HIGH RISK
Requires antenatal prophylaxis with enoxaparin and TEDS
Refer to obstetric medicine (QCCH) or obstetric consultant (SMH).

Single previous provoked VTE without FHx or thrombophilia (inherited or APS)	
Thrombophilia (inherited or APS) + no VTE	
Medical co-morbidities e.g. heart or lung disease, SLE, cancer, inflammatory conditions, nephrotic syndrome, sickle cell disease, Morbid obesity BMI > 40 kg/m^2, myeloproliferative disorders, IV drug user.	
Surgical procedure e.g. appendicectomy	
OHSS	
Hospital Admission	

→ INTERMEDIATE RISK
Refer to obstetric medicine/consultant.
Consider antenatal prophylaxis with enoxaparin (and TEDS if in patient)

Age > 35 years	
Obesity (BMI > 30 kg/m_2)	
Parity ≥3	
Smoker	
Gross vacricose veins	
Immobility, e.g. paraplegia, SPD, long distance travel (>4 hours)	
Pre-eclampsia	
Current systemic infection	
Dehydration/hyperemesis/OHSS	
Multiple pregnancy or ART/IVF	
Surgical procedure e.g.TOP/ERPC	
Family history of VTE	
Low risk Thrombophilia	

→ 4 or more risk factors antenatal LMWH

→ 3 risk factors LMWH from 28/40

→ 2 risk factors LMWH only if admitted

→ 1 risk factor, or 2 if an out patient

→ LOWER RISK
mobilisation and avoidance of dehydration
Consider TEDS

Figure 2 - Imperial Thromboprophylaxis Postnatal Risk Assessment

Postnatal Assessment & Management: assess after delivery

(to be assessed on Labour Ward) (tick box)

Any previous VTE	
Anyone requiring antenatal prophylactic LMWH	
Prolonged admission >10 days	
FH of VTE and low risk thrombophilia	
High risk thrombophilia	

HIGH RISK
6 weeks prophylactic enoxaparin and TEDS

Emergency C-Section	
Thrombophilia (heritable or acquired + no VTE)	
Class lll obesity (BMI>40kg/m²)	
Prolonged hospital admission	
Any surgical procedure in puerperium	
Readmission in puerperium	
Medical co-morbidities e.g. heart or lung disease, SLE, cancer, inflammatory conditions, nephrotic syndrome, sickle cell disease, myeloproliferative disorders, IVDU.	

INTERMEDIATE RISK
At least 10 days postnatal prophylactic enoxaparin.
(and TEDS while an in patient)

NB. If persisting or >3 factors consider extending prophylaxis with LMWH

Age > 35 years	
Obesity (BMI > 30 kg/m^2)	
Parity ≥3	
Smoker	
Gross varicose veins	
Immobility, e.g. paraplegia, SPD, long distance travel	
Pre-eclampsia	
Current systemic infection	
Wound infection	
Mid--cavity or rotational forceps	
Prolonged labour (>24 hours)	
Stillbirth this pregnancy	
PPH>1L or blood transfusion	
Low risk thrombophilia	
Elective caesarean section	
Family history of VTE	
Preterm delivery	

2 or more risk factors

1 risk factor

LOWER RISK
Early mobilisation and avoidance of dehydration
+ Consider TEDS

Postnatal Hypertension

- Discharged day >4
- Community midwifery BPs
- If birth <34 weeks offer APS
- Obstetric medical clinic involvement if:
  - Labile BP, > 2 antihypertensives, PCR >100, Cr >90
- If on antihypertensive – 2 week medical review
- If no antihypertensive – 6-8 week medical review
  - Urine dip – if > 1 + protein, renal check up in 3 m with possibility of renal referral
- Refer in if BP >160/100

Antihypertensives and Breastfeeding

No known adverse effects

- *Labetalol*
- *Nifedipine*
- *Enalapril*
- *Captopril*
- *Atenalol*
- *Metoprolol*

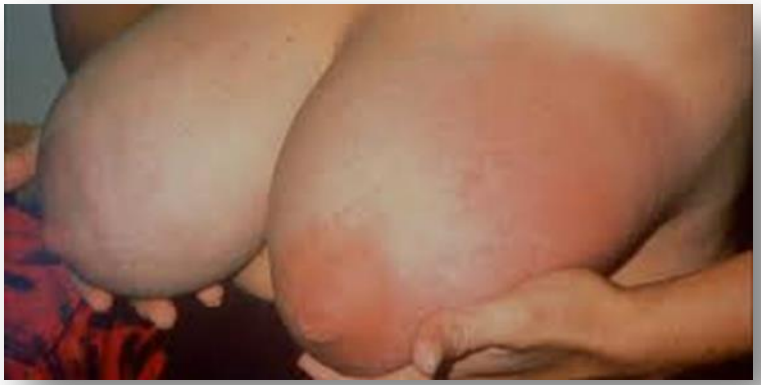
Insufficient evidence

- *ARBs*
- *Other ACE inhibitors*
- *Amlodipine*

Avoid diuretics

Mastitis

- Breast Pain, erythema ‘wedge’, swelling, discharge
- Assess for abscess



Further Management

- Anlagesia – Paracetamol, Ibuprofen

- Antibiotics; 1st Line
- PO Co-amoxiclav 625mg TDS 10-14 days

- 2nd Line Penicillin allergic /Non lactational mastitis
- PO Clindamycin 300mg QDS 10-14 days

If breastfeeding , MRSA+, fungal – consult microbiology

Lactational mastitis

- Encourage patient to “express breast, heat and rest”

Discharge home

Clinically well patients do NOT require admission

Perineal Infection and breakdown

- Ask about perineum and offer inspection at each visit
- If concerns about infection – start broad spectrum antibiotic immediately (co-amoxiclav) and review
- Refer to MDAU if clinically unwell, broken down concerns/unsure, not improving with antibiotics, obvious mismatch

Contraception

- Earliest known time from birth to ovulation 27 days
- Breastfeeding – fully – 6m
- 12 month pregnancy interval recommended (18-24 months for LSCS)
- Aiming to trial – fitting of IUDs (MIRENA, Cu coil) immediately post partum.

FSRH publishes its new guideline 'Contraception After Pregnancy',

Thank you


What are you talking about?! Just lay eggs!
No! I want an epidural ...