Course Title	IMT 3 Simulation	Scenario Title	Pregnant woman with severe headache (tension headache)
Patient	Name: Joanne Xiao Age: 38 Hospital number: SC123456		

Learning Outcomes	Technical	Non-Technical
	Safe management of a pregnant woman with a headache, including discharge planning involving other teams Recognise and rule out "red flag features": - Sudden-onset headache / thunderclap or worst headache ever - Headache that takes longer than usual to resolve or persists for more than 48 hours - Associated symptoms – fever, seizures, focal neurology, photophobia, diplopia, - Requires excessive use of opioids	- Know the environment - Call for help early - Mobilise all available resources - Use cognitive aids - Re-evaluate repeatedly
Scenario Overview	A pregnant woman (P1, 29 weeks), BMI 35, presents with a severe headache. She has other children at home, is anxious and not keen on being admitted. If given early analgesia (paracetamol and ibuprofen are safe to give) then the patient's pain will improve and the patient can be safely discharged with appropriate follow-up to be arranged. This scenario requires at least 2 faculty members: patient voice (can also be console/ phone advice if required), and ward nurse plant.	
Set Up	Manikin with wig sat up on trolley. Small table nearby with drug chart (PRN paracetamol only and none taken so far) and an observations chart which demonstrates a mild tachycardia, but nil else. If mannikin is able to be programmed – heart sounds and chest sounds are normal Nurse (plant) in room and is helpful for getting obs.	
Prop List	Oxygen mask and tubing BP cuff Monitor Blood results Drug chart (paracetamol PRN only, nil given) Urine dip (if asked, negative for blood, protein and leucocytes) ECG (if asked)	

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Console		A	B (if inadequate painkillers given)	C (if early painkillers given)	D
	RR	20	22	20	
	SpO_2	96% (RA)	97% (RA)	97% (RA)	
	HR	105	120	100	
	BP	125/75	120/72	122/72	
	Rhythm	Sinus rhythm	Sinus rhythm	Sinus rhythm	
	Temp	37.3C	37.3C	37.3C	
	Eyes	Open	Open	Open	
Expected Actions	Evaluate the patient in a systematic fashion (A-E) Rule out red flag causes of headache, and provide analgesia and reassurance. Likely tension headache. The best candidates will identify that the patient is well enough to go home, and will liaise with obstetrics team for safe discharge with appropriate follow-up.				
End Point	The scenario ends once the candidate has arranged for discharge. If the candidate wishes to admit the patient and request intracranial imaging, the scenario will end at this point.				

Participant briefing	You are the IMT 3 doctor covering the wards overnight in a busy district general hospital. You have received a call from the obstetrics SpR to review a 38 year old lady (29 weeks pregnant) who called her midwife as she has a severe headache.
Patient Briefing	You are worried about your headache, but you do not want to stay in hospital if it can be avoided. You have another child to look after at home and need to get home to see them, as your partner has to go to work. You have been avoiding taking any painkillers as you are worried it may harm your baby. The team may wish to perform a CT scan on your head and if you are offered a scan you are very scared that this could harm your baby. History of headache: - Headache is on both sides of the head, ongoing since yesterday - Often suffers from bilateral “tension headaches” (only if asked) - These have increased in severity recently - Worried her pain is getting worse, but also worried about taking any medications in case they harm her baby - Pain remains bilateral “like a band” around your head, worse at the front - Pain came on gradually, currently 8/10 severity If asked: - Vomited once a few days ago, but nothing since - Headache not worse on coughing/sneezing - No neck stiffness - No fevers - No visual/ neurological symptoms

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Patient PMHx	PMH: Tension headaches, first pregnancy Drug hx: Nil regular Social hx: Workers for HR, working from home to support child care Family hx: Nil relevant
Investigations & results	**Investigations** **Bloods:** Hb 115, WCC 9.5, Pl 155, Na 140, K 4.6, Ur 2.1, Creat 51, CRP 8 **CXR:** Clear **ECG:** Sinus tachycardia **Urine dip:** Positive for leucocytes, negative for blood and protein
Plant Briefing	You are an experienced obstetric nurse, but are less familiar with medical problems. You are helpful and will do as directed by the candidate.

On Examination

	A	B (no painkillers given)	C (Early painkillers given)	D
Colour	Normal	Normal	Normal	
Skin	Slightly sweaty	Sweaty	Normal	
CRT	2 seconds	2 seconds	2 seconds	
GCS	15	15	15	
Pain Score	7	9	4	
Abdomen	29 weeks pregnant	29 weeks pregnant	29 weeks pregnant	

Life Savers	The plant can suggest that the candidate could contact “their seniors” and “other teams” if they become stuck.
Telephone Assistance	**Medical Consultant (phone advice)**: You have been woken up but are sympathetic to the SpR and will try to be helpful. You tell your registrar that you trust their judgement, but that it is difficult to give advice without having the patient in front of you. If pushed, you will advise that if there are red flag features then admit, but if her headache has settled and there are no red flag features, the patient could be discharged with ambulatory medical/obstetric follow-up to be booked. **Obstetrics SpR/Consultant –** You are competent and if asked for advice, you will be helpful. You trust the judgement of the medical registrar and will be happy to arrange repeat joint follow-up in clinic.

Debriefing	**Technical**

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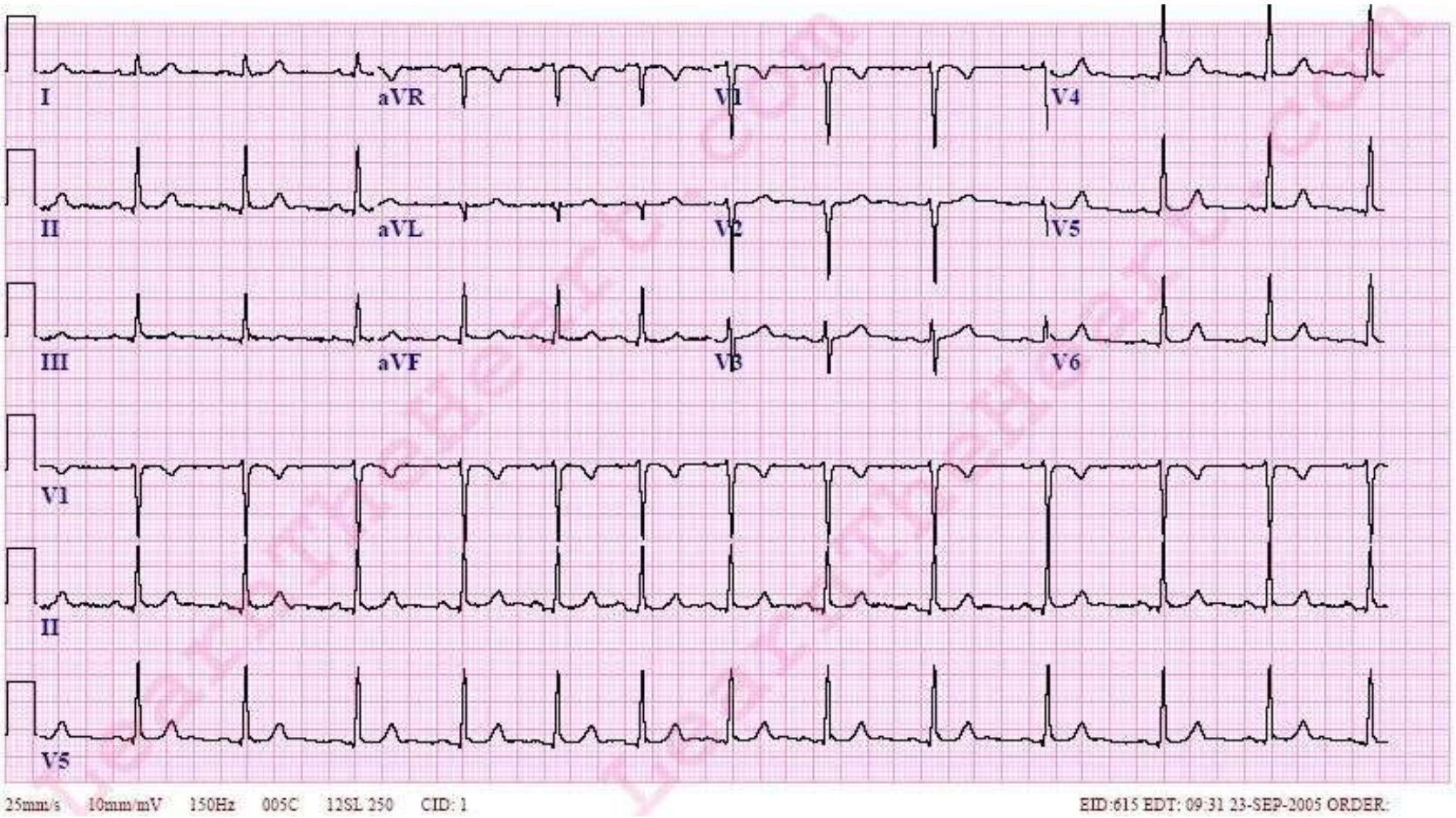
	Safe management of a pregnant woman with a headache (as per RCP guidance): - Ensure urine dip performed - Rule out “red flags” as below - Paracetamol safe to give, as are NSAIDs up to 30 weeks gestation (ibuprofen is NSAID of choice and remember pregnant women are still at risk of renal/GI problems if used long-term) - Often useful to manage these patients with senior input and shared care with obstetrics team - If brain imaging required, CT/MRI safe, but avoid gadolinium contrast - Organising appropriate follow-up very important - Acute Care Toolkit (see references) very useful for common problems in pregnancy “Red flag features” include (RCP guidelines): - Sudden-onset headache / thunderclap or worst headache ever - Headache that takes longer than usual to resolve or persists for more than 48 hours - Associated symptoms – fever, seizures, focal neurology, photophobia, diplopia, - Requires excessive use of opioids **Non-technical as appropriate:** - Know the environment - Call for help early - Mobilise all available resources - Use cognitive aids Re-evaluate repeatedly
References	Acute Care Toolkit – Royal College of Physicians (2019) ACOG guidelines (2022)
Curriculum mapping	**CiP Descriptors (Internal Medicine Curriculum Stage 1):** - Managing medical problems in patients in other specialties and special cases - Managing outpatients with long term conditions - Managing an MDT including discharge planning - Communicates effectively and is able to share decision making, while maintaining appropriate situational awareness, professional behaviour and professional judgement
Written by: Date: Review date:	Ewan Mackay, reviewed by Lojana Chandrarajan (Consultant acute medicine, Obstetric Medicine) and Paula Lee (Deputy lead for Simulation and Essential Clinical Skills) 21/06/22 21/06/24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