Triage Orientation

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Learning Objectives

- ❑ Review the expectations of Triage assessment and documentation
- ❑ Review and understand the Triage Classification system : Obstetric Triage Acuity Scale (OTAS)
- ❑ Increase awareness of the need for timely assessment by all health care providers
- ❑ Identify consistent teaching information to be provided to women/families
- ❑ Review the common discomforts of pregnancy, related causes and recommendations, including treatment options

Triage: Definition

- **Brief, systematic, maternal and fetal assessment** performed when a woman presents for care allowing assignment of priority level for care and deployment of personnel as indicated by the priority level based on the identified clinical needs (AWHONN, 2013).

- Conducted by an experience nurse. The nurse is the first to assess the patient and can detect abnormal findings or subtle signs and symptoms of developing complications in the woman and/or fetus

- Patient will then be directed according to her OTAS score

- **Determines in which delay the patient needs to be seen by a physician**

Roles of the triage nurse
(Beveridge et al., 1998; Durand et al., 2007)

The triage nurse must:

- ❑ Greet patients and family in a warm empathetic manner
- ❑ Perform brief visual assessments (limited in obstetrics)
- ❑ Evaluate every patient presenting to triage, no matter the mode of arrival (ambulating, wheelchair, stretcher)
- ❑ Accompany the patient to evaluation area when necessary
- ❑ Inform patients/families about triage process
- ❑ Obtain all information related to chief complaints using efficient interview principles
- ❑ Keep patients/families aware of delays
- ❑ Document the assessment, interventions and findings
- ❑ Triage patients into priority groups using OTAS and its guidelines

Triage nurse's **CLINICAL JUDGMENT** is essential:
To recognize priorities
To perform under stressful circumstances rapidly

Roles of the triage nurse
(Beveridge et al., 1998; Durand et al., 2007)

The triage nurse must:

- ❑ Reassess waiting patients as per OTAS score and as necessary
- ❑ Inform patients to notify triage nurse of any change in condition
- ❑ Give report to the physicianand to the nurse who is going to take care of the patient
- ❑ Document to whom report was given to
- ❑ Advise the nurse in charge when level of activity compromises the ability for complete evaluation and reassessment of the patients
- ❑ Have rapid access to or a direct view of the waiting area to be able to do constant visual assessment
- ❑ Ensure confidentiality and privacy (as much as possible)
- ❑ Ensure proper cleaning and disposal of equipment
- ❑ Ensure proper stocking of triage area

Triage : Who do we see in our Birthing Center triage ?

- Our pregnant patients (starting at 18 weeks of pregnancy) and postpartum (up until 6 weeks postpartum) for obstetrical issues. Non obstetrical issues should be seen in the ER.

- Pregnant patients, 18 weeks and above, even if they are not followed at the glen with obstetrical issues only. Once assessed by the MRP, dependent on the patient status (obstetrically stable or unstable), the decision can be made to transfer the patient to their center or discharge them home for follow up with their own physician. If the patient is deemed too unstable for transport, this will be decided by the MRP.

We do not see:

- Postpartum patients from other centers. Any patients who have postpartum complaints from other centers should be seen in the ER.
    - ◊ (At times, we will make exceptions from mothers staying in the NICU with their newborn and are transfers from far away regions such as Chibougamau, however this is discussed with the ANM or NIC).

Algorithm : ED vs BC

Pregnant/postpartum patient presents to ED or BC triage

MUHC - Algorithm for the management of pregnant/ postpartum patients
2023-06-12

< 18 weeks gestation or
≥ 6 weeks postpartum

Assess patient stability
- Vital signs
- Safe transport (RN/PAB accompanies PRN)

Remains in ED (1)

If miscarriage

Refer to EPAC clinic (Mon-Fri 8-11 am)

≥ 18 weeks gestation or
< 6 weeks postpartum**

Assess patient stability
- Vital signs
- Safe transport (RN/PAB accompanies PRN)

Patient with imminent delivery in ED

Call OBS to ED
- NIC 36677
- OBS staff 35006

Stable condition

Obstetrical health issue (2)

Assess in BC triage

Non obstetrical health issue

Assess in ED

Unstable condition or at risk of decompensating (1)

If presents to ED stays in ED

Co-management with OBS

If presents to BC triage
- Assess vital signs
- Call & transfer to ED
  - ED staff 32723
- If too unstable
  - CALL CODE BLUE 55555

(1) **Patients at risk of decompensating should stay in ED.**
Consult OBS/Gyne as needed. This includes patients::
- Requiring immediate assistance from ED medical team:
  - Hemodynamic instability
    - HR <40 or >130; RR <12; SBP <90 and symptomatic
  - Respiratory instability (O2sat <95%; acute SOB; asthma)
- Symptomatic cardiac patients - Chest pain with/without cardiac features
- Neurological symptoms (↓LOC; seizures; limb weakness, slurred speech)
- C-spine precautions

(2) Obstetrical issues include:
- Abdominal, pelvic, back pain
- Vaginal discharge or bleeding
- UTI or cesarean wound infection
- S/S DVT
- Hypertension or signs of preeclampsia (headache, blurred vision, epigastric/RUQ pain)

** **Only postpartum patients who delivered at the MUHC are seen in BC triage.**

Call for transfers/ questions
BC NIC 36677
ED NIC 32725
BC staff 35006
ED staff 32723

Abbreviations: ED Emergency department; BC Birthing centre; EPAC Early pregnancy assessment clinicHR Heart rate; RR Respiratory rate; SOB Shortness of breath; LOC Level of consciousness; UTI Urinary tract infection; S/S DVT Signs & symptoms deep vein thrombosis; RUQ Right upper quadrant; NIC Nurse in charge

Triage principles
(Beveridge et al., 1998; Watts, 2010)

- All patients should be assessed (at least pre-triage) within 10 minutes of arrival.
- The priority for care may change following a more complete assessment or as patient's signs and symptoms change. There should be documentation of the initial triage as well as any changes. The initial triage level is still used for administrative purposes.
- The triage assessment is based on limited information. It is not a final diagnosis.
- Patients presenting for a booked event may identify additional concerns that may change the priority.
  - For example, a patient presenting for a booked NST that reports decreased fetal movement, her acuity level would then be 2, and not 5.
- **Instinct should not be used to decrease a priority when facts suggest that there may be a problem. -> Our instinct may be based on biases**

Triage flow

- Chief complaint and rapid assessment (pre-triage)
- OTAS score (Advise physician right away if Level 1 or 2)
- Infection control screening
- Full triage assessment : maternal and fetal (modify your OTAS score if necessary)
- Advise physician if not already done
- Initiate collective orders PRN, perform appropriate interventions
- Continue care according to guidelines
- Admit or discharge after medical evaluation/interventions

A patient that requires active care in triage for more than 4 hours should be admitted !

What questions should you ALWAYS ask a patient when doing a rapid assessment ?

Pre-Triage

- ❑ EDC (Term? Preterm?) How many weeks is she?
- ❑ Gravida, Para: Which pregnancy is this for you? Any abortion? Miscarriage?
- ❑ Fetal movements: Is the baby moving well? If not, how long since DFM/since no FM?
- ❑ PVB: Quantity? Characteristics? Time since onset?
- ❑ Presence of contractions: Pt contracting? If so, how often? Since when?
- ❑ Status of membrane (PVL): Ruptured membranes? What colour?
- ❑ What is your chief complaint? : What brings you in TODAY?
- ❑ Does patient belong in OB triage? Should she be redirected to ER (Cardiac or severe respiratory issue)? **RN to accompany patient if sent to ER**

OTAS Tools

OTAS : Obstetrical Triage Acuity Scale

Different tools :

- OTAS (Labor and Delivery)
- OTAS Postpartum

+ Modifiers that can change your OTAS score

OTAS Tools

- Developed by OB nurses and physicians from London Health Sciences Centre (LHSC)
- Based on the Canadian Triage and Acuity Scale (CTAS) with a comprehensive perspective of the obstetrical aspects
- Considers gestational age, signs and symptoms, status of membranes, presence of bleeding, and common obstetric and medical complaints in the determination of care priority
- Aim of the OTAS: ensure efficiency and consistency in prioritization of patients presenting in OB triage settings
- The score 1 to 5 (urgency of care) based on patient's complaint will determine:
  - Nursing secondary and ongoing assessment
  - The speed with which the patient is to be seen by the provider
- Timing of care and patient flow will be determined by the identification of the need for further fetal heart monitoring and further mother assessment and by the patient's stability .

		OTAS	Level 1 (Resuscitative)	Level 2 (Emergent)	Level 3 (Urgent)	Level 4 (Less Urgent)	Level 5 (Non-Urgent)
		Time to Initial Assessment	Immediate	Immediate	5-10 minutes	5-10 minutes	5-10 minutes
		Time to Health Care Practitioner	Immediate	< 15 minutes	< 30 minutes	< 60 minutes	< 120 minutes
		Re-assessment	Continuous Nursing Care	Every 15 minutes	Every 15 minutes	Every 30 minutes	Every 60 minutes
Complaint Oriented Triage (COT)	OB	Signs/symptoms of Labour/Fluid Loss	-Suspected imminent birth -Cord prolapse	-<37 weeks, uterine contractions <5 minutes apart -<37 weeks vaginal fluid loss -Unplanned/unattended birth	-≥37 weeks, contractions 2-4 minutes apart	-Contractions >5 minutes apart -Vaginal fluid loss ≥37wks	-Cervical ripening -Pre-booked maternal visits (eg., Rh Immune Globulin)
		Antenatal Bleeding		-Active vaginal bleeding	-History of bleeding prior to presentation	-Spotting	
		Fetal Assessment	-No fetal movement	-Decreased fetal movement -FH concerns, abnormal BPP/dopplers (clinic)			-NST (booked) -ECV assessment
		Hypertensive Neurological Signs/symptoms	-Actively seizing, postictal -Loss/altered consciousness	-Sudden severe headache -Visual disturbance, epigastric pain -CVA like symptoms	-Mild/Mod/Subacute headache -Edema (non-dependent)	-Follow up to Hypertension (OB clinic) e.g. blood work	-Chronic recurring headache
		Pain		-Acute severe abdominal/pelvic pain -Chest pain	-Mild/Mod abdominal pain -Back pain -Flank pain		-Pregnancy discomforts
	Complications	Abdominal Trauma	-Major trauma-penetrating	-Major trauma-blunt	-Minor trauma (e.g., minor MVC/fall)	-Fall, no direct abdominal trauma	
		Signs of Infection		-Fever, chills, uterine tenderness (not r/t contractions)		-UTI complaints, hematuria -Fever, cough, congestion	-Rashes
				-Nausea/vomiting/diarrhea s/s moderate dehydration	-Nausea/vomiting/diarrhea, s/s mild dehydration	-Nausea/vomiting/diarrhea	

OTAS: Acuity Level Definitions (Watts, 2010)

- **LEVEL 1: RESUSCITATION:** Conditions that are an imminent threat to maternal and/or fetal life (or imminent risk of deterioration) requiring immediate aggressive intervention. Direct admission to the birthing center would be indicated in these situations.

  MD and RN take charge immediately

- **LEVEL 2: EMERGENT:** Conditions that are a potential threat to maternal and/or fetal life or function requiring rapid medical intervention. Admission to the birthing center may be indicated in these situations

  MD assessment in 15 minutes

  RN takes charge immediately

OTAS: Acuity Level Definitions (Watts, 2010)

- **LEVEL 3: URGENT:** Conditions that would precipitate admission to the Birthing Center/Antenatal unit for an intervention or for birth.

- **LEVEL 4: LESS URGENT:** The list of presenting complaints or scenarios is not meant to be all inclusive or absolute in their application. OB triage nurses are expected to use their experiences and critical thinking skills to “increase the triage priority” (e.g. move the woman from a level 5 to a level 2) even if the patient’s condition does not fit exactly with the facts or definitions on the scale.

- **LEVEL 5: NON-URGENT:** Conditions that do not pose a threat to mother or fetus. May include pre-booked/scheduled visits with no other concerns. If the potential for delay of the intervention exists or occurs for > 2 hours this would not pose a threat to mother or fetus.

When assigning an OTAS score:

- If a patient looks ill/unstable and you are not sure, triage her as a priority 1 or 2.
- The patient should always be assigned a higher priority (i.e. If unsure about priority 3 or 4, patient should be a priority 3)
- The triage RN is encouraged to use her experience and judgment to increase priority score, even if the patient does not seem to fit exactly with the facts or definitions on the triage scale.
- In case of doubt, the nurse should consult her coworkers.
- The goal is to avoid any prejudice
- Priority scores are dynamic. In secondary assessment, modifiers are used to ***support or increase*** the acuity level that was assigned based on the presenting complaint alone during primary assessment. **Priority scores should NOT be reduced, hence why you need to make sure that you ask all the right questions in your primary assessment.**

Organize your interventions according to your OTAS score/rapid assessment

- ❑ Once OTAS is assigned, communicate with MD (see next slide for communication algorithm)
- ❑ Decide on proper evaluation area (if not done already): Waiting room? Monitoring area chairs? Back stretcher? Triage room?
- ❑ If patient OTAS 1 or 2, accompany patient to next clinical area
- ❑ Plan nursing interventions
- ❑ Plan diagnostic and therapeutic measures as per protocols and/or collective orders (e.g. Bloods, Urine sample, Speculum, etc.)

Triage Communication Algorithm

Infection control Screening

- ❑ Respiratory / Contagious disease?
- ❑ Triage nurse needs to be aware of MSSS memos concerning nosocomial infections in Quebec hospitals and community infections requiring isolation or further questioning
- ❑ COVID screening tool to be filled out before entering triage (during outbreak)
- ❑ Appropriate protective measures to be applied depending on screening results (mask, isolation, hand washing)

Full triage assessment

- ❑ After Pre-triage questions
- ❑ Any other relevant information relating to chief complaint (PET symptoms, history of fall or abdominal trauma, MVA, swelling, etc.)
- ❑ Obstetrical history and pregnancy risk factors
  - ❑ Allergies
  - ❑ Serologies
  - ❑ Medication
  - ❑ Past medical and surgical history
  - ❑ Lifestyle (cigarettes, drugs, alcohol)
  - ❑ Primary language (presence of a language barrier?)
  - ❑ Environment (support)
  - ❑ Infectious disease screening
- ❑ Maternal vital signs and additional assessment PRN (CBGM, neuro, PET sx, swelling)
- ❑ Fetal Heart Rate assessment (use appropriate method depending on gestational age)
- ❑ Assess support/psychosocial

You can modify your OTAS score after your full assessment

Test, Test

ID#: 123456 | Visit#: Vrandom | Unit/Bed: Train Hold | Attending: | Hem Risk: | EGA: | GBS: + | Allergies: NKA | Drug: No | Latex: NegLatex

Triage | Admission | Flowsheet | Shift Assess | Stored Strip | Delivery | Recovery | SBAR | Split Screen

PREGNANCY INFORMATION

Grav	Para	Term	Preterm	SAB	IAB	Living
4	3					3

Cesareans	VBAC's	No. Babies in Womb
3	0	1

LMP	EDC	EDC per U/S
2024/11/30	yyyy/MM/dd	yyyy/MM/dd

BMI	Age	Date of Birth
27.3	19	1999/01/01

ALLERGIES

Medication: No
Latex: No Latex Allergies
Medication Allergies: NKA
Food Allergies: NKA
Environmental Allergies: NKA

PRENATAL LABS and CARE

Blood Type	RPR/VDRL	Chlamydia
O Positive	Nonreactive	

Group Beta Strep	Rubella	Gonorrhea
	Immune	

HbSAg	Hepatitis C	Herpes	HIV+ Exposure Test
Negative	Negative		Negative

DRUG AND ALCOHOL USE

Alcohol	Marijuana	Cocaine/Crack
Details	Details	Details

Other Illicit Drugs	Smoking Status
Details	Details

CASE MANAGEMENTS/ALERTS

To incorporate in care: Yes / No
Describe Case Management or Alert needs:

Entry Date/Time: 2025/01/13 11:19
Current Admission Date/Time: 2025/01/13 11:19
New Inf Control Screen

INFLUENZA

Fever or history of fever with current illness and/or cough: No / Yes

PLUS 1 of the following
- [ ] Sore Throat
- [ ] Shortness of Breath
- [ ] Myalgias
- [ ] Headache
- [ ] Arthralgias

Influenza Action Plan:

MRSA

Previously known MRSA+	No / Yes	Injection drug user	No / Yes
Internal MUHC transfers from MUHC sites	No / Yes	Admitted from Northern Canada	No / Yes
Transfer from other hospital, Hospitalized >24 hours			No / Yes
Previously hospitalized in any healthcare institution admitted in the past 5 years			No / Yes

MRSA Plan of Care: Repeat Screen X's 1

TUBERCULOSIS

Does the patient have symptoms that might be indicative of pulmonary TB? No / Yes

Cough for 2 weeks AND one of the following
- [ ] Fever
- [ ] Weight Loss
- [ ] Night Sweats

Is the patient coming from a TB endemic area?

Has patient had recent exposure i.e. contact (TB in household in the past 2 years) No / Yes

TB Action Plan:

OB Triage - Test, Test (123456)

	23/04/08 23:50	23/05/17 11:06	23/05/17 15:06	23/05/17 15:20	23/05/30 11:18	24/03/11 14:13	24/04/10 16:10	24/05/29 14:12	25/01/13 11:27
Stage of Pregnancy	Labor	OB Triage	OB Triage	OB Triage	Labor	OB Triage			
Assessment Type		Ongoing Assessment	Triage Intake Assessment	Triage Intake Assessment		Ongoing Assessment			
Triage Intake Information									
Triage Intake Date Time			23/05/17 15:07 EDT	23/05/17 15:21 EDT		24/03/11 14:13 EDT			
Arrived By			Ambulatory	Ambulatory		Ambulatory			
Fetal Movement			Present *Annotation: twins, both moving*	Present		Present *Annotation: x 2*			
Contractions			Denies/Absent *Annotation: but veeling pain in back, intermittent*	Denies/Absent		Regular			
Contraction Frequency						unknown and painful			
Time Contractions Began						24/03/11 03:00 EDT			
ROM			Denies	Denies		Denies			
Vaginal Bleeding			Small; Bright Red	None		None			
Vaginal Discharge			Denies	Denies		Denies			
Chief Complaint			pvb bleeding mono/mono twins	Bp 155/75 at jean coutu, Asymptmatic, followed in clinic.		pre term , twin preg uncomplicated, reguler ctxs painful started over night ~ 3:00 am, no pvl no pvb. resident called for assesment			

Triage ALL | NST | Discharge | MEWS

Test, Test ID#: 123456 Unit/Bed: Train Train1 Attending: Hem Risk: EGA: 145.1 GBS: Allergies: Drug: Latex:

Triage | Admission | Flowsheet | Shift Assess | Stored Strip | Delivery | Recovery | SBAR | Split Screen

MUHC Adm General Info HR - Test, Test (123456)

Patient Name: Test, Test | Pt. Age: 19 | Demographics

PREGNANCY INFORMATION

EDC: 2019/07/15 | EDC per U/S: 2019/07/15 | LMP: 2018/10/02

Grav	Para	Term	Preterm	SAB	IAB	Living
2	0			1		

Cesareans | VBAC's | Ectopic | Multiple Births | No. Babies in Womb

PRENATAL CARE

MUHC Primary OBS:

Non-MUHC OB Provider: BROWN, BILL

MFM Status: IVF/Infertility; Foetal Issues; Maternal Health Issues; None

MFM Transfer: Yes; No

Prepreg Wt: Lbs 150.0 | Kg 68.2

Height: In 63.0 | Cm 160.0

Adolescent Screen

DRUG AND ALCOHOL USE

Alcohol | Details

Marijuana | Details

Cocaine/Crack | Details

Other Illicit Drugs | Details

Smoking Status | Details

ALCOHOL AND DRUG USE DETAILS:

ALLERGIES

Medication | Latex

Medication Allergies

Food Allergies | Environmental Allergies

COMMUNICATION

Primary Language

Preferred Language to Discuss Medical Condition

-- If primary language is not English, enter ability with English language

- No understanding, INTERPRETER needed
- Understands verbal communication
- Speaks English
- Reads English

Prim. language, Other

Communication Barriers identified:

- None
- Language barrier
- Hearing deficit
- Visual deficit
- Mental retardation
- Other

Communication Aids needed

CASE MANAGEMENTS/ALERTS

Case Management and/or Alerts to incorporate in care: Yes No

Describe Case Management or Alert needs:

Currently Using Community Resources: Yes No N/A

If Yes, Specify Resources Currently using:

SUPPORT INFO

Support Person | Relationship | Relationship Other

VACCINE HISTORY

	Influenza Vaccine	Pneumococcal Vaccine	Tetanus Vaccine	Tdap Vaccine	Other Vaccine
	Yes No Uncertain	Yes No Uncertain	Yes No Uncertain	Yes No Uncertain	
Date	Influenza Vaccine Date	Pneumococcal Vaccine Date	Tetanus Vaccine Date	Tdap Vaccine Date	Other Vaccine Date

LABOR & DELIVERY PLANS

Pediatrician | Prenatal Classes Attended

Feeding Preference | Cord Blood Collection

Feeding Method Discussed: yyyy/MM/dd H:mm | Circumcision

Pain Management Plans:

- None
- Natural
- Medications
- Local
- Epidural
- Spinal

Plans for Labor & Delivery:

- None
- Birth Plan
- Cord Blood Banking
- Cord Blood Donation
- Placenta Request
- Other, Specify

Other Pain Management Plans

L&D Plans, Comments

ADOPTION INFORMATION

Adoption Requested: Yes No

Agency/Agent Handling Adoption:

Pt Contact with Infant after Birth: N/A Yes No

Outside Agency/Social/Case Worker: Yes No N/A

If Yes, Specify Agency/Social or Case Worker:

Tubal Ligation: No Yes

VBAC Consent Signed: N/A Yes No

Spiritual or Cultural PRACTICES to incorporate in care: Yes No N/A

Describe Practices:

Tubal Authorization Signed: N/A Yes No

Cesarean Consent Signed: N/A Yes No

Spiritual or Cultural DIETARY NEEDS to incorporate in care: Yes No N/A

Describe Dietary needs:

LIVING SITUATION/DISCHARGE PLANNING

Adequate Access to: Electric Heat Refrigeration Plumbing/Running water Phone Transportation

Living Arrangements | WIC Program | Person to take Pt Home at Discharge | Person Available to Help after Discharge

CAR SEAT

Aware of Car Seat Requirements: Yes No N/A

Help Required to Obtain Car Seat

Test, Test ID#: 123456 Unit/Bed: Train Train1 Attending: Hem Risk: EGA: 145.1 GBS: Allergies: Drug: Latex:

Triage | Admission | Flowsheet | Shift Assess | Stored Strip | Delivery | Recovery | SBAR | Split Screen

MUHC Adm Preg Info HR - Test, Test (123456)

MOST RECENT Lab Result Summary

Blood Type	Antibody Screen	Rubella	RPR/VDRL	HIV+ Exp Test	1 Hour Glucola	Other Labs/Comments
O Positive						

Rho(G) this preg	Rho(G) Date Given	Hepatitis B	Hepatitis C	Gonorrhea	Chlamydia

Group Beta Strep	Herpes Culture	Varicella

GTT Values

Fast	1 Hr	2 Hr	3 Hr

Laboratory Results OB - Test, Test (123456)

	21/02/26 16:22	21/05/13 14:06
Lab Results		
Blood Type	O Positive	O Positive *Annotation: test*
Hemoglobin		
Hematocrit		
Rubella		
Hepatitis B		
Group Beta Strep		
Gonorrhea		
Chlamydia		
RPR/VDRL		
HIV + Exposure Test		
PPD (TB Skin Test)		
Varicella		
Herpes Culture		
Glucose 1 Hr Glucola		
Recorded By:	mrodrigu	CPN

Menstrual History

Age Onset	Frequency	Duration	Amount	LMP Regular	Date Pos Preg Test	BCP's at Conception?	LMP
					yyyy/MM/dd		2018/10/02

Pregnancy History

Gravida	Para	Term	Preterm	SAB	IAB	Ectopic	Living	C/S	VBAC's	Multiple Births
2	0			1						

PREVIOUS PREGNANCIES

	DOB	GA	Birthwt	Hrs Labor	Sex	Del Type	Anesthesia	Hospital	PTL?	Infant Name	Comments
1											
2											
3											
4											
5											
6											

Additional Pregnancies

General Admit | Preg Info | History | Current Admit | Med Rec/Prob List | I&O | Care Plan

21/08/04 16:06 - Centricity Perinatal - User: Malorie Pierre Fecu (Nursing Staff) - Perinatal User View

Test, Test ID#: 123456 Unit/Bed: Train Train1 Attending: Hem Risk: EGA: 145.1 GBS: Allergies: Drug: Latex:

Triage | Admission | Flowsheet | Shift Assess | Stored Strip | Delivery | Recovery | SBAR | Split Screen

MUHC Adm Med/Gen/Inf/OB Hx HR - Test, Test (123456)

MEDICAL/GENETIC/INFECTIOUS/OB HISTORY

Normal Values

MEDICAL HISTORY

Diabetes	Yes / No / Unknown	Pulmonary (TB, Asthma)	Yes / No / Unknown
	Type 1 / Type 2 / Gestational Diabetes	Breast	Yes / No / Unknown
Hypertension	Yes / No / Unknown	Gyn Surgery	Yes / No / Unknown
	Preeclampsia/Eclampsia / Chronic Hypertension / Chronic Hypertension with Preeclampsia / Gestational Hypertension	Hospitalization/Surgery	Yes / No / Unknown
Blood Transfusion	Yes / No / Unknown	Anesthetic Complications	Yes / No / Unknown
D (Rh) Sensitization	Yes / No / Unknown	Abnormal Pap Smear	Yes / No / Unknown
Heart Disease	Yes / No / Unknown	Uterine Anomaly/DES	Yes / No / Unknown
Autoimmune Disorder	Yes / No / Unknown	Infertility	Yes / No / Unknown
Kidney Disease/UTI	Yes / No / Unknown	Assisted Reproductive Technology	Yes / No / Unknown
Neurologic/Epilepsy	Yes / No / Unknown	Other Medical Diseases	Yes / No / Unknown
Psychiatric Disorders	Yes / No / Unknown	Significant Family History	Yes / No / Unknown
Depression/PP Depression	Yes / No / Unknown	Prior Uterine Classical Incision, Myomectomy, Uterine Perforation, Wall Thinning, or Uterine Rupture	Yes / No / Unknown
Hepatitis/Liver Disease	Yes / No / Unknown		
Varicosities/Phlebitis	Yes / No / Unknown		
Thyroid Dysfunction	Yes / No / Unknown		
Trauma/Violence	Yes / No / Unknown		

Enter DETAILS for Medical History:

INFECTIOUS HISTORY

Gonorrhea	Yes / No / Unknown	Patient or Partner has Hx of Genital Herpes	Yes / No / Unknown
Chlamydia	Yes / No / Unknown	Tuberculosis or Exposure to Tuberculosis	Yes / No / Unknown
Syphilis	Yes / No / Unknown	Hepatitis B,C	Yes / No / Unknown
HIV/AIDS	Yes / No / Unknown	Rash or Viral Illness Since LMP	Yes / No / Unknown
Human Papilloma Virus	Yes / No / Unknown	Foreign Travel in Past Month	Yes / No / Unknown
		Elevated Temperature on Admission	Yes / No / Unknown

Enter DETAILS of Infectious Disease History:

GENETIC HISTORY- Include Patient, Father of Baby or anyone in either Family

Age >= 35 at EDD	Yes / No / Unknown	Cystic Fibrosis	Yes / No / Unknown
Thalassemia (Italian, Greek, Mediterranean, Asian); MCV <80	Yes / No / Unknown	Huntington's Chorea	Yes / No / Unknown
Neural Tube Defect (Spina Bifida, Meningomyelocele or Anencephaly)	Yes / No / Unknown	Mental Retardation/Autism	Yes / No / Unknown
Congenital Heart Defect	Yes / No / Unknown	If yes, was person tested for Fragile X	Yes / No / Unknown
Down Syndrome	Yes / No / Unknown	Other Inherited Genetic or Chromosomal Disorders	Yes / No / Unknown
Tay-Sachs (Ashkenazi Jewish, Cajun, French-Canadian)	Yes / No / Unknown	Maternal Metabolic Disorder (Type 1 Diabetes, PKU)	Yes / No / Unknown
Canavan (Ashkenazi Jewish)	Yes / No / Unknown	Patient Father or FOB had a Child with Birth Defects not Listed Above	Yes / No / Unknown
Familial Dysautonomia (Ashkenazi Jewish)	Yes / No / Unknown	Recurrent Pregnancy Loss or Stillbirth	Yes / No / Unknown
Sickle Cell Disease or Trait (African)	Yes / No / Unknown	Any Other History	Yes / No / Unknown
Hemophilia/Blood Disorders	Yes / No / Unknown	Medications (Including Supplements, Vitamins, Herbs, OTC Drugs) or Recreational Drugs/Alcohol since LMP	Yes / No / Unknown
Muscular Dystrophy	Yes / No / Unknown		

If yes, Agent(s) and Strength/Dosage

Enter DETAILS for Genetic History:

Test, Test ID#: 123456 Unit/Bed: Train Train1 Attending: Hem Risk: EGA: 145.1 GBS: Allergies: Drug: Latex:

Triage | Admission | Flowsheet | Shift Assess | Stored Strip | Delivery | Recovery | SBAR | Split Screen

MUHC Adm Current Info HR - Test, Test (123456)

Entry Date/Time: 2021/01/13 23:12

Review Prev Adm | New Admission | Normal Values

ADMISSION INFORMATION

Current Admission Date/Time: yyyy/MM/dd H :mm

Reason for Admission
- Onset of Labor
- Rupture of Membranes
- Induction of Labor
- Primary Cesarean Section
- Repeat Cesarean Section
- Spontaneous Abortion
- Preterm Labor
- Observation
- Other

Other Reason for Admission

Prenatal Records Available: Yes No Requested

General Admission Information: Reviewed Updated Confirmed

Updated/Reviewed By

EGA p/Dates

EGA p/US

Method of Arrival
- Ambulatory
- Wheelchair
- Stretcher
- Direct Admit
- Transfer From
- Ambulance
- Helicopter

Admitted From

Reason for Induction
- Not Applicable
- Chronic Hypertension
- Chronic Hypertension with Preeclampsia
- Eclampsia
- Elective/Social
- Fetal Anomalies
- Fetal Demise
- Gestational Hypertension
- Indicated by Fetal Testing
- Intrauterine Growth Restriction
- Macrosomia
- Maternal Cardiac Disease
- Maternal Diabetes
- Oligohydramnios
- Polyhydramnios
- Postdate
- Preeclamsia
- Premature Rupture of Membranes
- Successful External Version
- Suspected Chorioamnionitis
- Other

Reason for Induction Other

INFECTIOUS DISEASE SCREEN

MRSA

Previously known MRSA+	No Yes	Injection drug user	No Yes
Internal MUHC transfers from MUHC sites	No Yes	Admitted from Northern Canada	No Yes
Transfer from other hospital, Hospitalized >24 hours	No Yes		
Previously hospitalized in any healthcare institution admitted in the past 5 years	No Yes		

MRSA Plan of Care

INFLUENZA

Fever or history of fever with current illness and/or cough: No Yes

PLUS 1 of the following
- Sore Throat
- Shortness of Breath
- Myalgias
- Headache
- Arthralgias

Influenza Action Plan: Initiate Droplet and Contact Isolation

TUBERCULOSIS

Does the patient have symptoms that might be indicative of pulmonary TB? No Yes

Cough for 2 weeks AND one of the following
- Fever
- Weight Loss
- Night Sweats

Is the patient coming from a TB endemic area?

Has patient had recent exposure i.e. contact (TB in household in the past 2 years) No Yes

TB Action Plan

Belongings/Adv. Dir | Learning Assess | Psychosocial | Nutrition/Functional | Pre-Induction Checklist

Test, Test ID#: 123456 Unit/Bed: Train Train1 Attending: Hem Risk: EGA: 145.1 GBS: Allergies: Drug: Latex:

Triage | Admission | Flowsheet | Shift Assess | Stored Strip | Delivery | Recovery | SBAR | Split Screen

MUHC Adm Med Rec Prob List HR - Test, Test (123456)

BMI: 31.1 | Pre-Preg Wt: 150 | Height(in): 63.0 (* BMI will calculate once weight is entered on Review of Systems)

Med Reconciliation - Test, Test (123456)

Entry Date/Time: 2021/01/19 11:16 | New Form | Patient Taking No Medications | Information Source | Other Source

Current Medications including Prescriptions, OTC, Herbals, Vitamins, Eye Drops **AS PER ORDER**

	Route	Dose	Frequency	Last Dose	Admission	Transfer 1	Transfer 2	Discharge
Medication 1: multivtamin				yyyy/MM/dd H :mm				
Medication 2				yyyy/MM/dd H :mm				
Medication 3				yyyy/MM/dd H :mm				
Medication 4				yyyy/MM/dd H :mm				
Medication 5				yyyy/MM/dd H :mm				
Medication 6				yyyy/MM/dd H :mm				
Medication 7				yyyy/MM/dd H :mm				
Medication 8				yyyy/MM/dd H :mm				

Medications Other/Details

	21/01/19 11:16
Medication 1	
Medication	multivtamin
Recorded by	mrodrigu

PROBLEM LIST

	N/A	Active	Resolved	
Fetal Genetic Disease	○	○	○	
Fetal Anomaly	○	○	○	
Fetal Arrhythmia	○	○	○	
Isoimmunization	○	○	○	
Multiple Pregnancy	○	○	○	
Spontaneous Preterm Labour	○	○	○	
Abnormal Fetal Growth	○	○	○	
Intrauterine Fetal Demise	○	○	○	
Post-Term Pregnancy	○	○	○	
Maternal Hypertensive	○	○	○	
Placenta Praevia	○	○	○	
Maternal Medical Problems	○	○	○	
Other Maternal Issues	○	○	○	
Other Problems	○	○	○	
Other Problems	○	○	○	
Other Problems	○	○	○	
Other Problems	○	○	○	
Other Problems	○	○	○	
Other Problems	○	○	○	
Other Problems	○	○	○	

Tips for the Triage Interview (Beveridge et al., 1998)

- ❑Initial questions should be open-ended (subjective assessment), and closed questions (objective assessment) can be used to validate information.
- ❑Open ended questions: Help elicit feelings and perceptions along with information.
- ❑Closed questions (with yes or no answers) : useful for obtaining facts.
- ❑Non-verbal information is also an important source of information. Effective triage requires the use of sight, hearing, smell and touch.
- ❑There are many non-verbal clues: facial grimaces, cyanosis, perspiration, eye contact...
- ❑Listen to what the patient is saying and pay attention to questions they are reluctant or unable to answer.
- ❑Listen for a cough, hoarseness, labored respiration...
- ❑Touch the patient; assess heart rate and skin temperature and moisture.
- ❑Notice odors such as the smell of alcohol or infection.

Tips for the Triage Interview (Beveridge et al., 1998)

- Physical assessment must be rapid, concise, and focused.
  - Observe, palpate and auscultate.

- Purpose is to gather enough information to make a clinical judgment for priority of care, not a final medical diagnosis. Often, the most time consuming task of triage is to allay patient and family anxiety.

- Many factors influence effective communication in triage: language barriers, age, pain level, hearing disability, mental competency.
  - You will develop interview techniques that suit your communication style, the clientele, and the environment.

- Attitude and empathy are important aspects.
  - Remaining consistent and non-judgmental toward all patients is important. Any element of prejudice, leading to a moral judgment of patients, can increase patient risk due to incorrect assignment of triage levels, to low care needs priority. Do not to prejudge patients based on appearance or attitude.

Ongoing evaluation/interventions

- **Fetal status assessment**
  - Perform Leopold's manoeuvres to determine fetal position PRN
    - https://www.youtube.com/watch?v=KQ3L1n5XiLw
  - Apply EFM if appropriate. Continue EFM as per Fetal Surveillance guidelines for observation of fetal status or uterine activity
    - < 23 6/7 weeks: **doptone** for 1 min and keep the toco to r/o PTL (if necessary)
    - ≥ 24 0/7 weeks: **NST** for 20 mins then r/a

- Initiate diagnostic and therapeutic measures required as per protocols/collective orders (e.g. PET labs, urine sample)
- Even if not the initial complaint, pay attention to any mental health complaints (perinatal population is very vulnerable!)

BREAK

Fetal Health surveillance

- **Non-Stress Test (NST)**
  - Over 20 min period
  - Over 24 weeks

- **Doptone (≥ 18 weeks) – over 1 min.**
  - On all patients presenting to OB triage as part of initial assessment
  - Use to reassess pt and for IA
  - Below 23 weeks: monitor FH for 1 min and keep the Toco to r/o PTL (if necessary)

Doptone – Intermittent auscultation

- ❑ Assess maternal pulse at the same time as you obtain the FH
- ❑ Ensure to have FH (vs placenta or cord)
- ❑ Auscultate the FHR over a minimal time period of 60 seconds
- ❑ Count at least over 6 sec to confirm baseline
- ❑ Cannot be used to determine variability or type of decelerations

Differentiating sounds

- Fetal heartbeat 
- Umbilical cord or placenta 
- Maternal heart beat 
- Fetal heart and umbilical cord 

Fetal Health surveillance: IA (SOGC, 2007)

Table 10. Recommended frequency of auscultation

	First stage–latent phase	First stage–active phase	Active second stage
	For the latent phase of labour, there are very limited data on which to base a recommendation for IA. Optimally, most women will be in their own home environment with family support during this period but may be in hospital because of geographic /weather considerations.		
SOCG*	**Recommended at the time of assessment, approximately q1h**	**q 15–30 minutes**	**q 5 minutes**
ACOG†		q 15 minutes	q 5 minutes
AWHONN‡		q 15–30 minutes	q 5–15 minutes
RCOG§		q 15 minutes	q 5 minutes

*Society of Obstetricians and Gynecologists of Canada, 2007

† American College of Obstetricians and Gynecologists, 2005

‡ Association of Women's Health, Obstetric and Neonatal Nurses ; Feinstein, Sprague, & Trepanier, 2000[166]

§ Royal College of Obstetricians and Gynaecologists, 2001[7]

Fetal Health surveillance: NST (SOGC, 2007)

Table 5. Antepartum classification: non-stress test

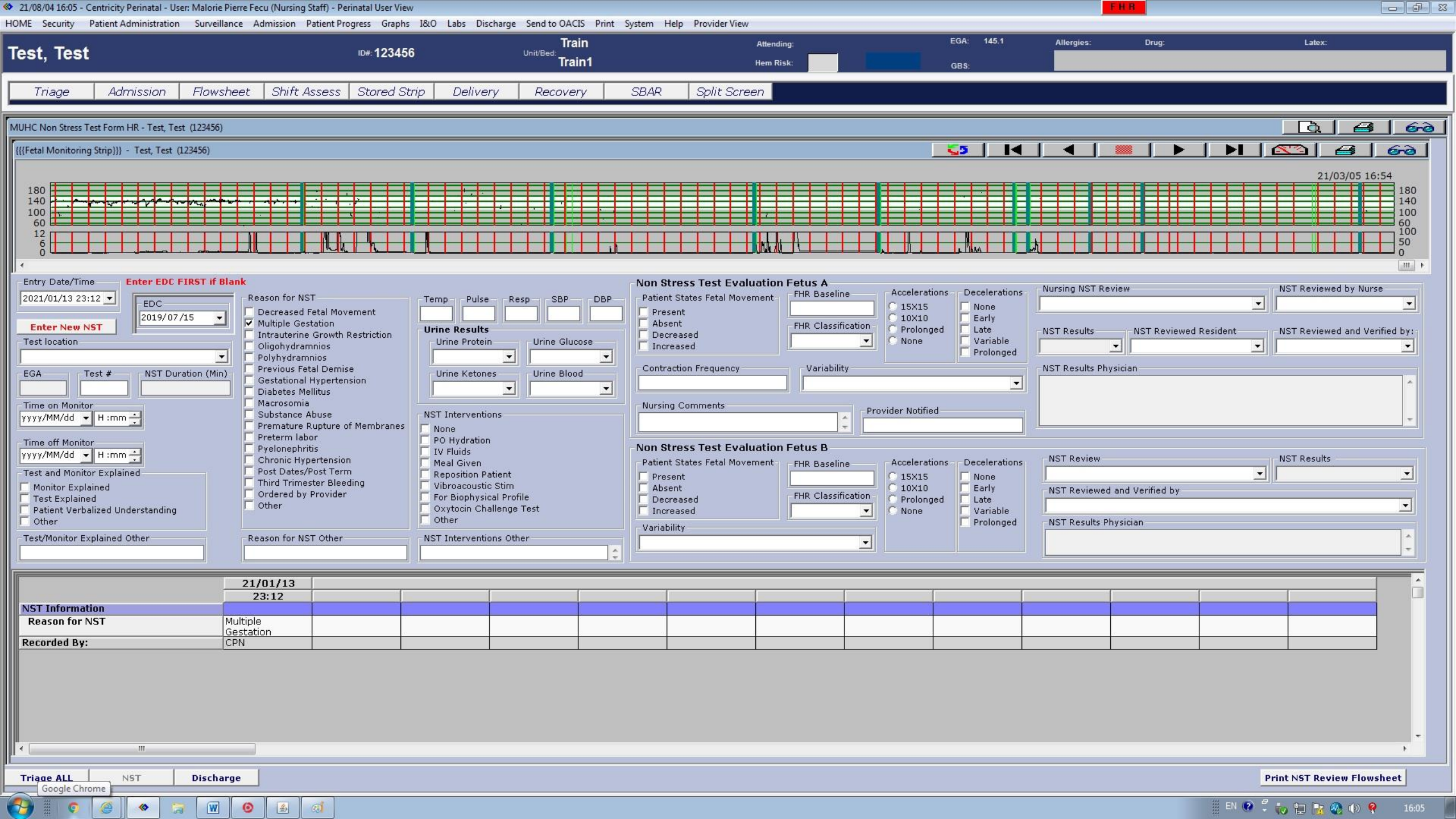
Parameter	Normal NST (Previously "Reactive")	Atypical NST (Previously "Non-Reactive")	Abnormal NST (Previously "Non-Reactive")
Baseline	110–160 bpm	• 100–110 bpm • > 160 bpm < 30 min. • Rising baseline	• Bradycardia < 100 bpm • Tachycardia > 160 for > 30 min. • Erratic baseline
Variability	• 6–25 bpm (moderate) • ≤ 5 (absent or minimal) for < 40 min.	≤ 5 (absent or minimal) for 40–80 min.	• ≤ 5 for ≥ 80 min. • ≥ 25 bpm > 10 min. • Sinusoidal
Decelerations	None or occasional variable < 30 sec.	Variable decelerations 30–60 sec. duration	• Variable decelerations > 60 sec. duration • Late deceleration(s)
Accelerations Term Fetus	≥ 2 accelerations with acme of ≥ 15 bpm, lasting 15 sec. <40 min. of testing	≤ 2 accelerations with acme of ≥ 15 bpm, lasting 15 sec. in 40–80 min.	• ≤ 2 accelerations with acme of ≥ 15 bpm, lasing 15 sec. in > 80 min.
Preterm Fetus (< 32 weeks)	≥ 2 accelerations with acme of ≥ 10 bpm, lasting 10 sec. <40 min. of testing	≤ 2 accelerations of ≥ 10 bpm, lasting 10 sec. in 40-80 min.	≤ 2 accelerations of ≥ 10 bpm, lasting 10 sec. in > 80 min.
ACTION	FURTHER ASSESSMENT OPTIONAL, based on total clinical picture	FURTHER ASSESSMENT REQUIRED	URGENT ACTION REQUIRED An overall assessment of the situation and further investigation with U/S or BPP is required. Some situations will require delivery.

Fetal health surveillance: NST

- Lasts at least **20 minutes**.
  - If a NST does not meet criteria for a normal NST after 20 minutes of testing, the recording should continue for another 20 minutes .
- After 40 minutes of testing:
  - If the fetus lacks accelerations, the primary care provider should be notified.
- **Atypical NST:**
  - Requires further assessment by the resident
  - **Must not be discontinued until authorized**.
- **Abnormal NST:**
  - Must be interpreted immediately by resident (or MFM staff)
  - Overall assessment of the situation and further investigation with BPP is required. Some situations will necessitate urgent delivery.
  - **Must not be discontinued until authorized.**

Fetal Health Surveillance: NST

- ❑ Performed by a RN (RNA can help put monitors on, but cannot assess the FHR)
- ❑ To be performed without delay for women who reports absent/decreased FM
- ❑ An NST may not be discontinued until a normal pattern is obtained or a physician authorizes.
- ❑ If a NST is interrupted for client comfort (e.g. Patient needs to void), the reason for interruption must be noted on the graph and in Centricity.
- ❑ Resident don’t need to sign the paper the sheet if NST recorded in Centricity
- ❑ NST form must be completed in Centricity, but no longer need to be printed.


21/08/04 16:05 - Centricity Perinatal - User: Malorie Pierre Fecu (Nursing Staff) - Perinatal User View
FHR
HOME Security Patient Administration Surveillance Admission Patient Progress Graphs I&O Labs Discharge Send to OACIS Print System Help Provider View
Test, Test
ID#: 123456
Unit/Bed: Train Train1
Attending:
Hem Risk:
EGA: 145.1
GBS:
Allergies: Drug: Latex:
Triage Admission Flowsheet Shift Assess Stored Strip Delivery Recovery SBAR Split Screen
MUHC Non Stress Test Form HR - Test, Test (123456)
{{{Fetal Monitoring Strip}}} - Test, Test (123456)
21/03/05 16:54
180 140 100 60 12 6 0
180 140 100 60 100 50 0
Entry Date/Time
2021/01/13 23:12
Enter EDC FIRST if Blank
EDC
2019/07/15
Enter New NST
Test location
EGA
Test #
NST Duration (Min)
Time on Monitor
yyyy/MM/dd H :mm
Time off Monitor
yyyy/MM/dd H :mm
Test and Monitor Explained
Monitor Explained
Test Explained
Patient Verbalized Understanding
Other
Test/Monitor Explained Other
Reason for NST
Decreased Fetal Movement
Multiple Gestation
Intrauterine Growth Restriction
Oligohydramnios
Polyhydramnios
Previous Fetal Demise
Gestational Hypertension
Diabetes Mellitus
Macrosomia
Substance Abuse
Premature Rupture of Membranes
Preterm labor
Pyelonephritis
Chronic Hypertension
Post Dates/Post Term
Third Trimester Bleeding
Ordered by Provider
Other
Reason for NST Other
Temp Pulse Resp SBP DBP
Urine Results
Urine Protein
Urine Glucose
Urine Ketones
Urine Blood
NST Interventions
None
PO Hydration
IV Fluids
Meal Given
Reposition Patient
Vibroacoustic Stim
For Biophysical Profile
Oxytocin Challenge Test
Other
NST Interventions Other
Non Stress Test Evaluation Fetus A
Patient States Fetal Movement
Present
Absent
Decreased
Increased
FHR Baseline
FHR Classification
Accelerations
15X15
10X10
Prolonged
None
Decelerations
None
Early
Late
Variable
Prolonged
Contraction Frequency
Variability
Nursing Comments
Provider Notified
Nursing NST Review
NST Reviewed by Nurse
NST Results
NST Reviewed Resident
NST Reviewed and Verified by:
NST Results Physician
Non Stress Test Evaluation Fetus B
Patient States Fetal Movement
Present
Absent
Decreased
Increased
FHR Baseline
FHR Classification
Accelerations
15X15
10X10
Prolonged
None
Decelerations
None
Early
Late
Variable
Prolonged
Variability
NST Review
NST Results
NST Reviewed and Verified by
NST Results Physician
21/01/13 23:12
NST Information
Reason for NST
Multiple Gestation
Recorded By:
CPN
Triage ALL
NST
Discharge
Print NST Review Flowsheet
Google Chrome
EN
16:05

Biophysical Profile (BPP)

Evaluation of fetal well being through the use of various reflex activities. It is done if NST atypical or abnormal, or if presence of risk factors despite a normal NST.

Assesses:

- Fetal tone
- Movement
- Breathing
- Amniotic fluid

- Score 0 or 2 points for each aspect of the BPP for a total score on 8
  - 8 :Reassuring
  - 6 :Non Reassuring
  - 0 to 4: Imminent Delivery for fetal indications

- Oligohydramnios constitutes an abnormal biophysical assessment regardless of the overall score.

Biophysical profile

Table 7. Perinatal mortality within one week of biophysical profile by BPP score*

Test Score Result	Interpretation	PNM within 1 week without intervention	Management
10/10 8/10 (normal fluid) 8/8 (NST not done)	Risk of fetal asphyxia extremely rare	1/1000	Intervention for obstetric and maternal factors.
8/10 (abnormal fluid)	Probable chronic fetal compromise	89/1000	Determine that there is evidence of renal tract function and intact membranes. If so, delivery of the term fetus is indicated. In the preterm fetus < 34 weeks, intensive surveillance may be preferred to maximize fetal maturity.[30]
6/10 (normal fluid)	Equivocal test, possible fetal asphyxia	Variable	Repeat test within 24 hr
6/10 (abnormal fluid)	Probable fetal asphyxia	89/1000	Delivery of the term fetus. In the preterm fetus < 34 weeks, intensive surveillance may be preferred to maximize fetal maturity.[30]
4/10	High probability of fetal asphyxia	91/1000	Deliver for fetal indications.
2/10	Fetal asphyxia almost certain	125/1000	Deliver for fetal indications.
0/10	Fetal asphyxia certain	600/1000	Deliver for fetal indications.

*Modified from Manning FA, Dynamic ultrasound-based fetal assessment: The fetal biophysical score[80]

Ongoing evaluation/interventions

OTAS	Level 1 (Resuscitative)	Level 2 (Emergent)	Level 3 (Urgent)	Level 4 (Less Urgent)	Level 5 (Non-Urgent)
Re-assessment	Continuous Nursing Care	Every 15 minutes	Every 15 minutes	Every 30 minutes	Every 60 minutes

- All patients waiting to be seen by a physician need to be reassessed by the triage nurse if the code priority time has elapsed
- The triage process and the priority score are dynamic; condition may improve or deteriorate over time. Reassessment is meant to ensure that the patient's status has not worsened since the last assessment.
- A safe waiting period is a co-responsibility between the nurse and the patient (patients need to be aware to notify triage RN of any change in their status)
- Reassessment consists of a quick visual assessment and key questions or a more complete assessment including vital signs (if needed)
  - Key questions: PVB, PVL, change in ctx, FM
  - FH as per guidelines
- Documented as «priority re-evaluated» (and notify MD if changes)

Ongoing evaluation/interventions : Modifiers

Obstetrical Triage Acuity Scale (OTAS)©

The following table is used to confirm or increase the acuity assigned based on the presenting complaint. The vital sign parameters are taken from CTAS[1] the Maternal Early Warning Criteria,[2] MEOWS.[3] Any one of the modifiers can increase the acuity.

Modifiers		Level 1 (Resuscitative)	Level 2 (Emergent)	Level 3 (Urgent)	Level 4 (Less Urgent)	Level 5 (Non-Urgent)
Hemodynamic Stability	General	Signs of shock	Signs of hemodynamic compromise	Vitals signs lower range of normal	Vital signs within normal range for patient	
	Pregnancy Specific	Systolic BP <90 mmHg AND HR >120	Systolic BP <90 mmHg AND HR -100-120			
			Systolic BP >160 Diastolic >100 mmHg	Systolic BP >140 Diastolic >90 mmHg		
Respiratory Distress	General	Severe distress	Moderate distress	Mild distress		
	Pregnancy Specific	O_2 sat <95% AND RR <10 or >30	O_2 sat <95% AND RR 21-30	O_2 sat <95% AND Normal RR		
Fetal Well-being (Fetal Heart Rate (FHR)			FHR <110 or >160 bpm Abnormal/Atypical EFM Meconium stained fluid			
Cervical Dilatation		Fully and pushing	≥6 cm dilatation			

[1]Canadian Association of Emergency Physicians (CAEP) and Canadian Triage Acuity Scale Working Group (2012). CTAS Complaint Oriented Triage Teaching/Reference Tool. http://caep.ca/resources/ctas

[2]Mhyre, J., D'Oria, R., Hameed, A., et al. The Maternal Early Warning Criteria: A Proposal from the National Partnership for Maternal Safety, JOGNN 2014;43:771-779.

[3]Singh S, McGlennan A, England A, Simons R. A validation study of the CEMACH recommended modified early obstetric warning system (MEOWS). Anaesthesia 2012;67(1):12-8.

Postpartum patients

- ❑ Can come to triage until 6 weeks postpartum
- ❑ Examples of reasons for visits to triage:

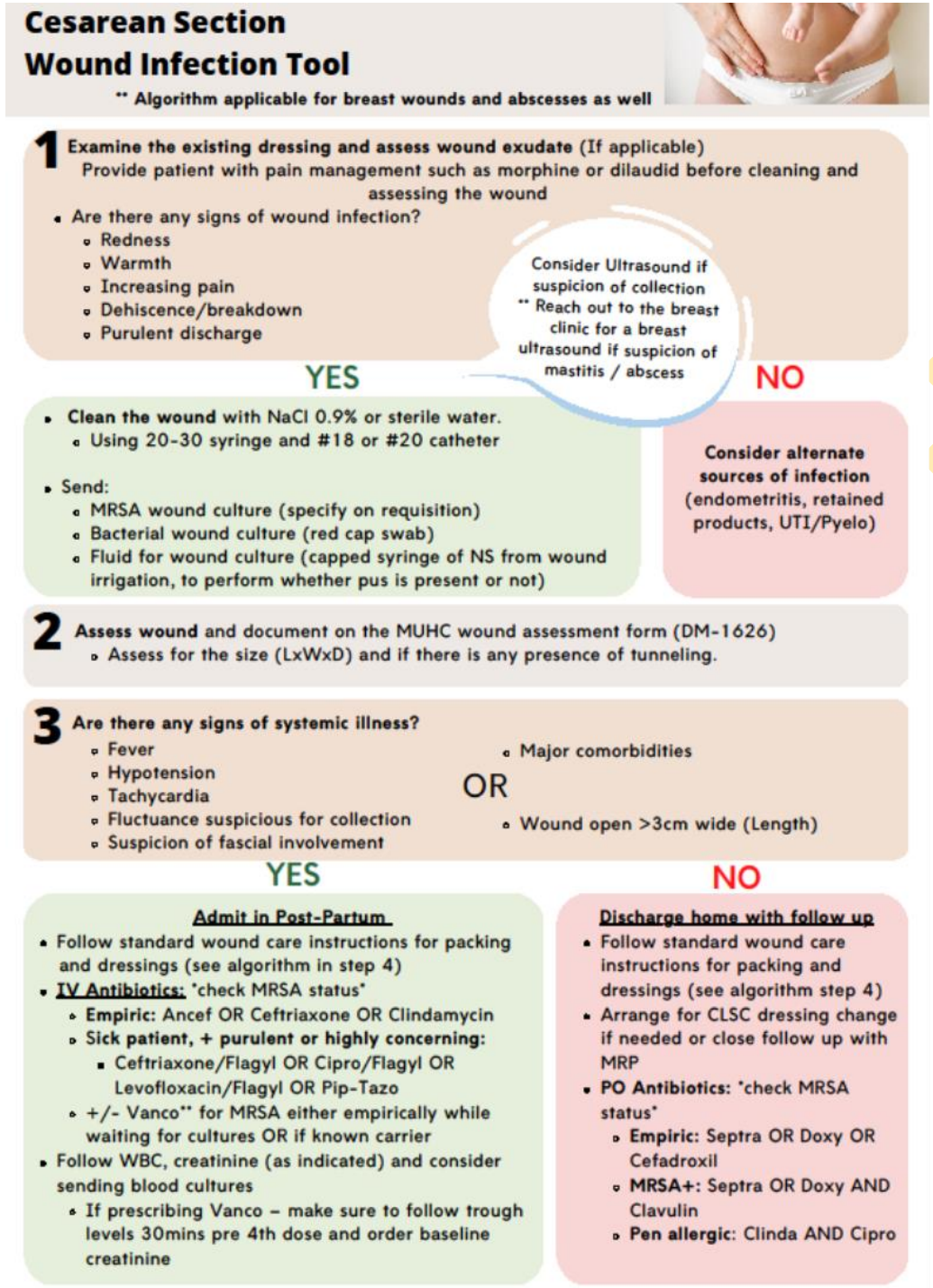
  - Secondary postpartum hemorrhage ± puerperal sepsis (postpartum infections)
  - Mastitis
  - Wound infection
  - Vaginal discharge/UTI symptoms
  - Pre-Eclampsia/Eclampsia
  - Postpartum cardiomyopathy
  - **Postpartum depression and other mental health issues**

		OTAS-Postpartum	Level 1 (Resuscitative)	Level 2 (Emergent)	Level 3 (Urgent)	Level 4 (Less Urgent)	Level 5 (Non-Urgent)
		Time to Initial Assessment	Immediate	Immediate	5-10 minutes	5-10 minutes	5-10 minutes
		Time to Health Care Practitioner	Immediate	< 15 minutes	< 30 minutes	< 60 minutes	< 120 minutes (2 hours)
		Re-assessment	Continuous Nursing Care	Every 15 minutes	Every 15 minutes	Every 30 minutes	Every 60 minutes
Complaint Oriented Triage (COT)	OB	Postnatal Bleeding		-Active vaginal bleeding with clots	-Bright red bleeding >spotting <5 days postpartum	-Bleeding/spotting with cramping >10 days postpartum	
		Hypertensive Neurological Signs/symptoms	-Seizure activity -Loss/altered consciousness	-Sudden severe headache -Visual disturbance, epigastric pain -CVA symptoms	-Mild/Mod/Subacute headache -Edema (non-dependent)	-Follow up to Hypertension (OB clinic) e.g. blood work	-Chronic recurring headache
	Medical Complications	Signs of Infection		-Chills, wound redness, or purulent drainage -Pelvic/abd pain with abn vaginal discharge -Unable to empty bladder/dysuria <72 hours postpartum	-Wound redness/swelling with serosanguinous drainage -Pelvic/abd pain	-Redness/swelling/pain in breast with fever -Dysuria	-Wound/incision check (scheduled) -Redness, tenderness in breast
		Respiratory	-Severe respiratory distress	-Moderate respiratory distress -Chest pain/pleuritic pain	-Mild respiratory distress -Unilateral reddened hot limb with fever/severe pain	-Unilateral reddened hot limb without fever -Constipation without fever	-Fatigue, malaise
		Substance Use/Mental Health		-High risk/unknown substance use/uncertain flight or safety risk -s/s depression and planned/attempted suicide	-Persistent headache (r/t epidural insertion with labour/birth) -Situational crisis (physical, emotional) -s/s substance withdrawal (e.g. anxiety/agitation, nausea, vomiting) -s/s depression/suicidal thoughts	-s/s depression/no suicidal ideation	

NOTE: Modifiers (Hemodynamic Stability, Respiratory Distress) may increase acuity

Postpartum patients

- ❑ Tools for assessing mental health in postpartum population : EPDS
- ❑ Magda's presentation on mastitis : what are the best practices ?
- ❑ Cesarean section wound assessement and care : the toolbox !



ALGORITHM FOR MANAGEMENT OF LACTATIONAL MASTTITIS

Lactating patient with breast pain and erythema, edema and induration

Unilateral focal symptoms

No systemic symptoms

Focal duct narrowing or galactocele

- ► Conservative treatment*
- ► Consider drainage of galactocele if enlarging, erythema, fluctuance or significant pain

Mild systemic symptoms

Mastitis

- ► Conservative treatment*
- ► If no improvement in 24-48hrs, treat with antibiotics**

Moderate or severe systemic symptoms

Mastitis

- ► Treat with antibiotics**

Fluctuant mass; fluid collection on ultrasonography

Breast abscess

- ► Drainage with or without antibiotics
- ► Referral to **Breast clinic**
- ► For open wounds refer to *Wound care protocol*

Unilateral diffuse symptoms

Subacute Symptoms

- ► Rule out breast cancer
- ► Referral to **Breast clinic**

Mild acute symptoms

Mastitis

- ► Conservative treatment*
- ► If no improvement in 24-48hrs, treat with antibiotics**

Moderate or severe acute symptoms

Mastitis

- ► Treat with antibiotics**

Bilateral symptoms

3-10 days postpartum

Stage II Physiological engorgement

>10 day postpartum

Inadequate breast emptying or hyperlactation

Conservative Treatment*

DEFINITIONS:

Systemic Symptoms: Malaise; Fever; Chills

Galactocele: Consisting of obstructed milk in a cyst-like cavity

Hyperlactation: Overproduction caused by excessive removal of milk (usually breastfeeding and pumping)

** Antibiotic regimen (for 10-14 days)

Dicloxacillin or Flucloxacillin 500 mg QID

***or* Cephalexin 500 mg QID**

***or* Amoxicillin/clavulanate 875 mg/125 mg BID**

For penicillin allergic patients

Clindamycin 300 mg QID

***or* Trimethoprim/sulfamethoxazole 800 mg/160 mg BID**

* Conservative Treatment

- **GENTLE** breast manipulation *(to avoid tissue trauma, edema and inflammation-**LYMPHATIC DRAINAGE, THERAPEUTIC BREAST MASSAGE**)*
- Rest and hydration
- Continuation of physiologic breastfeeding or milk expression
- Management of hyperlactation *(avoid trying to empty breast-feed according to baby's hunger cues or pump only the amount that baby needs)*
- Use of over-the-counter nonsteroidal and analgesic medication
- Application of ***warm compresses before*** and ***COLD compresses after*** milk expression

JAMA Feb 2023, Vol. 329, No. 7)

Time to physician

- ❑ The times to response are ideals (objectives), not established care standards.
- ❑ Physician should be informed promptly if any emergent conditions are suspected/present or of any deviation from normal findings.
- ❑ It is based on patient's complaint, their concern and on the need for an intervention in a timely manner to improve outcome and avoid complications
- ❑ The ability to achieve the time goals may vary with the available resources, efficiency of the department, or patient flow (inability to transfer patient, overcrowding…)

Discharge from triage

Patient should receive:

- ❑ Information regarding her clinical situation
- ❑ Information on prescriptions
- ❑ Dates and plan for follow-up
- ❑ Instructions on when to come back (signs and symptoms to observe)
- ❑ Instructions regarding restrictions, activity, diet, rest and hydration
- ❑ Summary of the consultation if needed
- ❑ A patient who has been discharged from triage should wait in the waiting room to liberate the bed.

The nurse needs to see the patient before she leaves!
If not possible, chart accordingly.
And don’t forget to give the patient’s card back!

Documentation standards (Angelini, 2003)

- ❑ **Arrival information** (reception):
  - ❑ Date and time of arrival (Centricity and pink paper)
- ❑ **Triage assessment**
  - ❑ Time
  - ❑ Information/findings
  - ❑ OTAS score
- ❑ **Reassessment(s) information (refer to reassessment section)**
  - ❑ Time
  - ❑ Changes
  - ❑ OTAS score (if changed)
- ❑ **Complete evaluation**
  - ❑ Time
  - ❑ Information/findings (refer to evaluation section)

Documentation standards (Angelini, 2003)

- ❑ Interventions done (e.g. medication given)
- ❑ Procedure performed, findings (including the negative one like intact membrane when r/o PPROM and laboratory results)
- ❑ Diagnostic, first aid measures, therapeutic interventions
- ❑ Fetal status, review fetal heart tracing as often as necessary (as per guidelines). If applicable, fill out NST form
- ❑ Conversation with consultants, regarding status and care, timing of calls
- ❑ Name of provider and time of medical evaluation
- ❑ Time of discharge, transfer, or admission
- ❑ Discharge instruction given to patient
- ❑ **DO NOT FORGET:** Legally, what is not documented is not done

Centricity specificities

- ❑ All pre-admitted patient will be in centricity (if they did their pre-admission). A patient can register herself starting at 18 weeks.
- ❑ When a pregnant OR postpartum patient is d/c home, select «discharge» in Centricity
- ❑When patient is admitted to OR or delivery room, you still need a d/c note from triage (e.g. report given to RN (NAME), pt transferred to OR ambulating/by stretcher)
- ❑ When a patient is transferred to Antepartum, transfer patient to «D6-Maternity» in Centricity
- ❑ Pay attention to what you are charting. Avoid typos (physicians' names). Make sure to select the appropriate field and information.
- ❑ The physician needs to write their consult notes (keep patients on the board is necessary)

Centricity audits

Examples of charting errors:

- ❑ Pt arrived to triage at 14h50 for decreased FM with ctx, an OTAS 3 was given (should be OTAS 2). The first FH was taken only at 16h00 when the patient was admitted to BC.
- ❑ Pt arrived at 2h00 with SRM, no initial questions asked (ctx, time of rupture, quantity, quality, PVB, FM). FH taken 15 minutes after. BP taken, no temperature. Pt was admitted for a c/s at 8h45. She stayed in triage over 6h with no temperature taken and no further assessment documented.
- ❑ Monitor applied with no FH. The first FH was charted more than 60 minutes after. Legally, you need a FH when you apply a monitor. Remember also that you have to chart your doptone.
- ❑ Another pt with decreased FM charted as an OTAS 3. It is always an OTAS 2.
- ❑ Pt c/o H/A and is known for gestational HBP. Pt stayed in triage for 4 hrs, no assessment of PET signs. First VS 1 hour after arrival.
- ❑ Pt sent for fetal tachycardia from Dr. office. No OTAS assigned (should have been OTAS 2). First FH done 35 min. after arrival.

Centricity audits

Most common errors / issues:

- ❑ Intervention not documented (especially VS)
- ❑ No notes for a prolonged time (sometimes despite patients being on CFHM)
- ❑ Wrong OTAS given

BREAK

Frequent patient complaints and associated interventions

Labour

- Term patient presenting with labour symptoms will have an NST and a VE.
  - If patient is in active labour, she will be admitted to BC
  - If patient is in latent phase/false labour, she may be sent home
  - If patient is in early labour, a second VE, 2 hours later, will be performed to assess progression of labour and need for admission to BC. If no cervical change after 2 hours, patient may be sent home
- Management of latent phase is controversial. Suggest to:
  - Avoid admission until active labor is established
  - Plan to be made to meet the woman's needs of at home including coping strategies and how and when to come back
  - Observation, rest and therapeutic analgesia are preferable (vs stimulation of labor)
- When false or early labor is determined, the patient should receive adequate instruction regarding when to return to hospital.
- Potential for term patient with a negative GBS to go home x24hrs with PROM

Labour: information for patients

Prodromal labour (false labour):

- Precursor/preliminary contractions that help prepare the body for actual labour
- Can be painful and continue for some time prior to true/actual labour
- Contractions can stop, or they can progress to true labour.

Characteristics	True/Actual Labour	Prelabour
Contractions	Regular, become stronger, closer together • Increase with walking or activity • Felt in lower back, radiating around to the lower portion of the abdomen • Continue despite use of comfort measures • Rest or sedation does not stop the contractions	Irregular or are only regular temporarily • Intensity will decrease • Often stop with walking or position change • Are felt in the back, groin, or abdomen above navel • often can be stopped with use of comfort measures, e.g. bath • Rest or sedation will stop the contractions

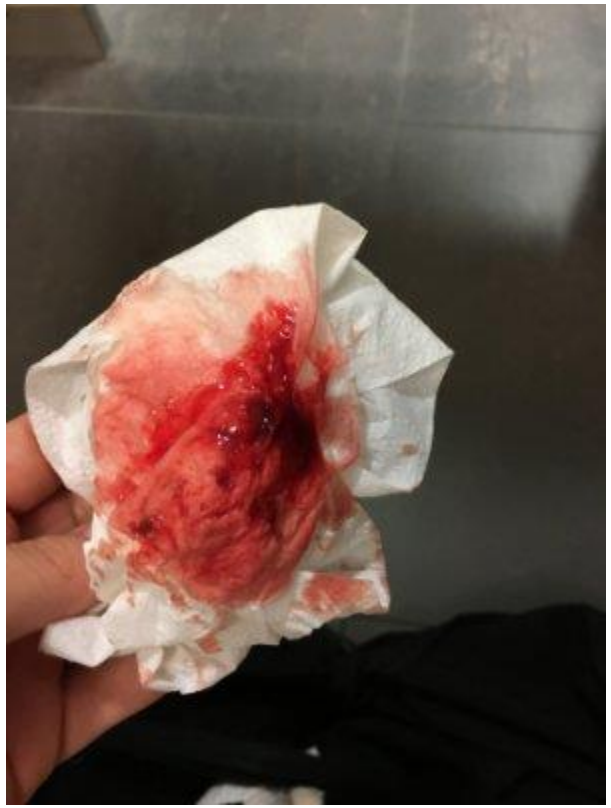
Labour: information for patients

Early labour

- Comfort Measures :
  - Walking and changing position
  - Taking a shower or bath
  - Maintaining hydration and nutrition by drinking fluids and eating easily digestible food and snacks
  - Listening to music
  - Watching a DVD/movie – use of distraction
  - Using slow breathing methods (breath awareness)
  - Use of massage
- The Woman Is to Return to OB Triage if:
  - Contractions become more regular (q2-5 minutes apart)
  - Membranes rupture
  - Baby's movements decrease
  - There is any bleeding
  - She needs help coping with her contractions

Vaginal bleeding

Can you tell what causes these different types of PVB ?



Vaginal bleeding

❑ **Causes:**

- Cervical changes
- Vaginal infection
- Labour
- Placental abruption
- Placenta previa/Vasa previa
- Preterm labour

❑ **Interventions**:

- Assess level of consciousness
- **Assess blood loss (quality/quantity)**
- Assess maternal and fetal well-being (NST, BPP)
- Perform Electronic fetal monitoring according to GA
- Assess abdominal tone
- Rule out labor (monitor contractions)
- R/o placenta abruptio, trauma and domestic violence
- Verify the RH status (Win-Rho might be indicated)
- Readjust the OTAS PRN
- Document your evaluation, results and interventions

Vaginal bleeding

❑ **Draw bloods**

- Complete blood count (CBC),
- Coagulation profile (INR/PT/PTT)
- Fibrinogen
- Type and screen/Crossmatch

❑ **The medical team will:**

- Identify placenta localization if unknown (perform bedside ultrasound to r/o previa)
- Confirm bleeding by sterile speculum exam and quantify the amount
- Perform a VE if placentation normal (confirmed) (or assess dilation through speculum exam)
- Win-rho if patient is Rh negative (if appropriate)
- Order a Kleinhauer-Betke test (if appropriate)

Vaginal bleeding

The Kleihauer-Betke test

Frequently called "KB" or "feto-maternal QT“

The KB test is used to determine if fetal blood is present in the maternal circulation.

For Rh- mothers : additional risk for alloimmunization

To order the test :

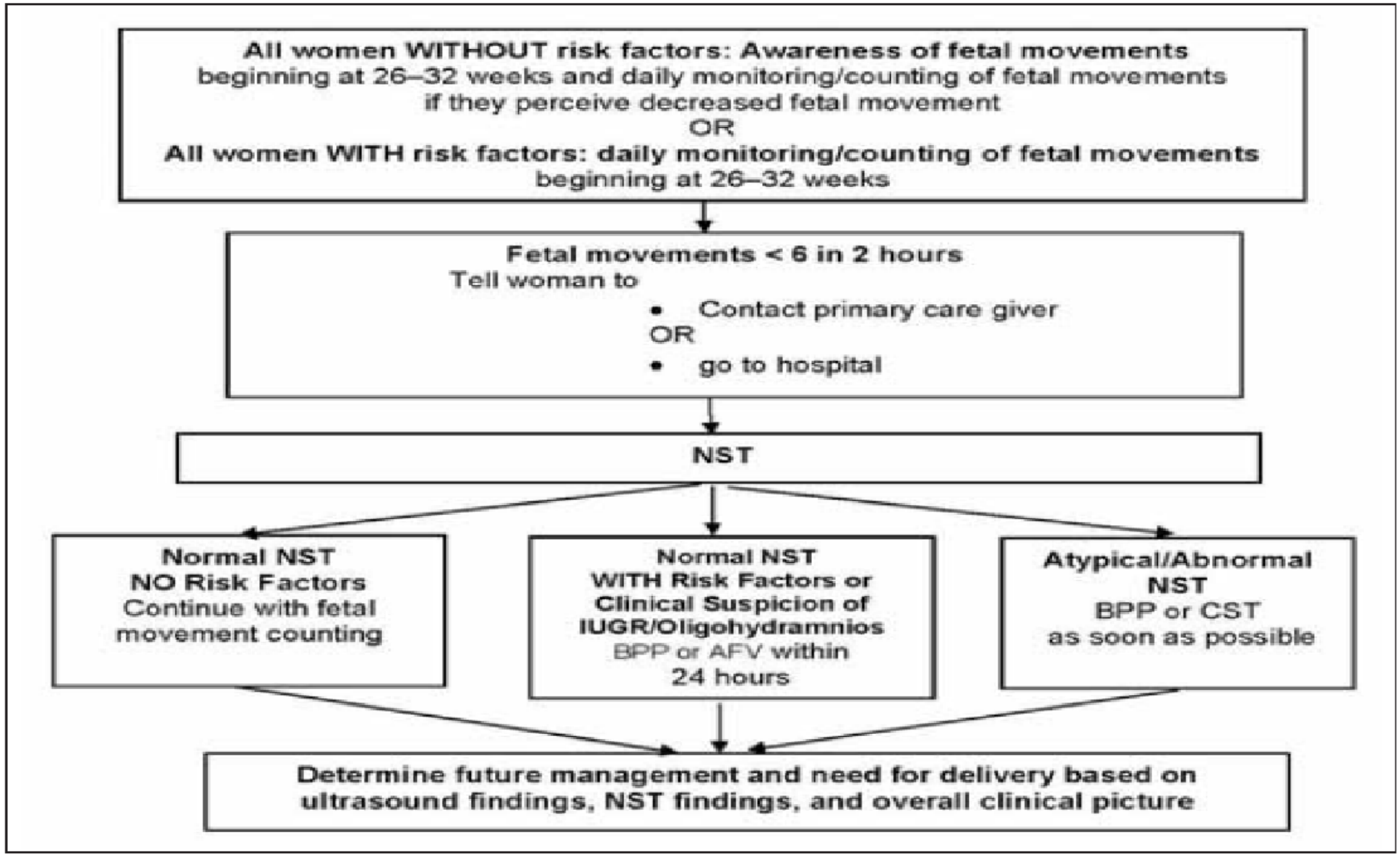
Lavender tube
E-requisition with the weight (Kg) of the mother

Decreased Fetal Movement

- Based on the premise that the fetus reduces or stops movement in response to chronic hypoxia in an attempt to reduce oxygen consumption and conserve energy

- **Decreased fetal movement is described as <6 distinct movement within 2 hours or less FM than patient's normal count.**

Figure 3. Fetal movement algorithm



Preterm labour

- Definition: Regular uterine contractions accompanied by progressive cervical dilation and / or effacement at greater than 20 weeks and less than 37 weeks 0 days' gestation (MOREOB, 2011).
  - <u>Signs and symptoms of PTL</u> :
    - Regular contractions (> 6/hour i.e. contractions ≤ 10 minutes apart)
    - Abdominal cramping or backache (bad cramps or stomach pains that don't go away)
    - Bleeding, trickle or gush of fluid from the vagina
    - Lower back pain/pressure, change in lower backache and/or cramps
    - Feeling that the baby is "pushing down"/pelvic pressure
    - Sudden increase in the amount of vaginal discharge
  - Some women may have vague signs or symptoms or may just feel that something isn't right.
    - Fever, chills
    - Flu-like symptoms
    - Dizziness
    - Vomiting and or diarrhea
    - "Bad headache" (severe and/or increasing in severity)

Preterm labour: interventions

- ❑ Assess FHR according to GA (Doptone < 23 weeks vs NST ≥ 24 weeks).
- ❑ Monitor uterine contractions
- ❑ Assist MD with vaginal/cervical cultures
- ❑ Do U/A and U/C
- ❑ Ensure that serologies are available
- ❑ Apply medical orders (if applicable)
- ❑ Readjust the OTAS PRN (is the patient going in active labour?)
- ❑ Document your evaluation, results and interventions

Premature Preterm Rupture of Membranes (PPROM)

- Definition: rupture of membrane that occurs at <37 weeks
- Possible complications of PPROM (MOREOB, 2011)
  - Preterm labor and delivery
  - Chorioamnionitis
  - Maternal infection
  - Umbilical cord compression or prolapse
  - Severe Oligohydramnios:
  - Pulmonary hypoplasia (< 26 weeks)
  - Increased cesarean rate

PPROM interventions

- ❑ Fetal heart monitoring according to GA
- ❑ Speculum exam and vaginal swabs to be collected by MD
- ❑ Urine bacterial culture
- ❑ Vaginal exam to monitor cervical changes
- ❑ Ultrasound (for BPP)
- ❑ Blood tests as ordered by MD (e.g. CBC, CRP) ; ensure serologies are available
- ❑ IV antibiotics as per protocol/collective orders

High blood pressure and Preeclampsia: definitions

- **Chronic HTN:** A systolic BP of 140 mmHg or greater, or a diastolic BP of 90 mmHg or greater diagnosed prior to pregnancy or before 20 weeks of gestation. Chronic hypertension is also considered when hypertension is diagnosed for the first time during pregnancy and does not improve during the normal postpartum course.
- **Gestational HTN:** A systolic BP of 140 mmHg or greater, or a diastolic BP of 90 mmHg or greater after 20 weeks gestation without proteinuria or systemic signs and symptoms.
- **Preeclampsia:** Gestational hypertension or chronic hypertension with one or more of the following signs or symptoms: a) proteinuria, b) other evidence of maternal end organ damage (including thrombocytopenia, renal insufficiency, impaired liver function, new onset headache not resolved by Acetaminophen or related to another illness, and visual disturbances); c) uteroplacental dysfunction (fetal growth restriction).
- **Severe hypertension:** A systolic BP of 160 mmHg and greater; or a diastolic BP of 110 mmHg and greater.
- **Hypertensive crisis:** A BP of 160/110 on two occasions 15 minutes apart. It is considered an obstetrical emergency that requires treatment within 30 to 60 minutes regardless of laboratory results. Will also require a readjustment of current medication
- **Eclampsia:** The incidence of seizures in an obstetrical patient with preeclampsia that cannot be associated with other health conditions.

Hypertensive emergency

- If a patient has a BP value equal to or higher than 160/110, the ensuing assessment should include:
  - Level of sedation (e.g., irritability)
  - BP, heart rate (HR), respiratory rate (RR), oxygen saturation (O2Sat)
  - Symptoms of preeclampsia: severe headache, visual disturbances, right upper quadrant abdominal pain or epigastric pain; nausea/vomiting
  - Signs of preeclampsia: oliguria, proteinuria (0.26g/g), hyperreflexia, O2Sat less than 95%
  - Fetal heart rate (FHR)
  - Repeat BP in 15 minutes

- If the **second** BP value is equal to or greater than 160/110, this is a hypertensive emergency.
- Advise obstetric medical team immediately

Best practices recommendations for BP measurements

- ❑ In the 10 minutes preceding the BP value, the patient should reduce her activity (e.g., no talking), relax and stay in a quiet environment;
- ❑ The patient should be sitting with her upper arm at heart level;
- ❑ The BP cuff is fitted for the patient's arm. The BP cuff should never be placed over clothing;
- ❑ If a BP value is repeatedly higher in one arm, prefer the arm with the higher values;
- ❑ Confirm an automated BP machine reading with a manual sphygmomanometer BP value.

Collective order: Initiating the First-Line Treatment for Severe Hypertension in the Obstetric Patient - First Dose of Immediate-Release Oral Nifedipine

1- REPEAT BLOOD PRESSURE (BP)

If an initial BP reading is equal to or higher than 160 mmHg/110 mmHg, it is imperative to **REPEAT** the reading **AFTER 15 MINUTES** before proceeding with the collective order.

2- CALL PHYSICIAN

If the second reading confirms a BP equal to or higher than 160 mmHg/110 mmHg, the patient is considered to be in a state of hypertensive emergency.
The nurse should immediately call the appropriate physician on call (refer to Table 1 – Emergency care communication tool).

If the physician is not available to assess the patient **within 15 minutes**, PROCEED TO STEP 3.

3- ASSESS CONTRAINDICATIONS

The administration of immediate release Nifedipine should be avoided in patients who have a history of allergy to Nifedipine, of cardiovascular events, or are at risk for cardiovascular events:

	YES	NO
• Previous allergic reaction to Nifedipine	☐	☐
• Heart condition (heart failure, myocardial infarction, Hypertrophic cardiomyopathy, etc)	☐	☐
• Pre-existing diabetes	☐	☐
• Hepatic insufficiency	☐	☐
• Hypotension	☐	☐
• Aortic stenosis	☐	☐
• Intestinal obstruction	☐	☐

4- ADMINISTER NIFEDIPINE

If there is no contraindication administer:
Nifedipine Immediate-Release 5 mg PO x 1 STAT

DO NOT administer a second dose of Nifedipine until the patient has been assessed by a physician.

5- CONTINUE ASSESSMENT

Repeat BP measurement after 20 minutes.
If the BP remains severe and a physician has not responded, call the attending obstetrician or staff doctor as per Appendix 1.
Repeat BP every 20 minutes until a physician assesses the patient.

6- DOCUMENT

High BP/PET: nursing interventions

- ❑ Specific interventions:
  - Provide calm quiet environment
  - Limit visitors (partner, other)
  - Assess associated signs and symptoms
  - Rule out pain
  - Assess level of consciousness
  - Assess signs of complications: eclampsia, HELLP, DIC, PRES (Posterior reversible encephalopathy syndrome)
- ❑ Clinical manifestations HELLP :
  - Abdominal/right upper quadrant pain, nausea\vomiting, hypertension (≥140\90) in 85% of cases, proteinuria in 85 % of cases
- ❑ Clinical manifestation of DIC:
  - Petechiae, ecchymosis, blood in urine, bleeding in gum, bleeding from IV insertion
- ❑ Clinical manifestation of PRES
  - Persistent visual disturbances, persistent headache, seizure and altered consciousness.
- ❑ Apply medical orders and/or collective orders(if applicable)
- ❑ Readjust the OTAS PRN
- ❑ Put preeclampsia tray at bedside PRN
- ❑ Document your evaluation, results and interventions

PET: Nursing interventions

- ❑ Use the collective order to send a PET work up as soon as possible
- ❑ PET labs: CBC, coagulation profile (INR/PT/PTT), liver profile (ALP, ALT, total bilirubin), AST, creatinine, albumin, electrolytes (Na, K, Cl), LDH, uric acid, random glucose. Cross-Match PRN
- ❑ Urine for random protein to creatinine ratio (urinary protein/cr ratio). Normal value is less than 0.03, which is equivalent to the previous reference value of less than 300mg for protein/24 hours .

Fall, abdominal trauma, MVA

Domestic or intimate partner violence:

- ❑ The most commonly struck body area is the abdomen, a risk factor for both maternal and fetal adverse outcome.
- ❑ Domestic or intimate partner violence increases during pregnancy and is clustered in the third trimester.
- ❑ Every woman who sustains trauma, particularly penetrating abdominal trauma, should be questioned specifically about domestic violence

Motor vehicle accident (MVA):

- ❑ Leading cause of maternal death
- ❑ Leading cause of fetal death after placental abruption
- ❑ Outcome can range from no trauma at all to severe multi-organ damage and death

Falls:

- ❑ Falls are the cause of almost the third of cases of maternal trauma
- ❑ More common in the latter half of pregnancy, particularly after 32 weeks.
- ❑ Complications: preterm labour, placental abruption, uterine rupture, fetal growth restriction, and fetal death.

Fall, abdominal trauma, MVA

- OBSTETRICAL COMPLICATIONS OF ABDOMINAL TRAUMA :
  - Placental abruption
  - Uterine rupture
  - Preterm labor
  - Direct fetal injury
  - Fetal hypoxic injury
  - Fetal death
  - Rh Alloimmunization
  - Unspecified antepartum hemorrhage
  - Preterm birth
  - Significant abdominal pain
  - Vaginal bleeding
  - Sustained contractions with frequency of more than once per 10 minutes during a monitoring period of 4 hours
  - Rupture of the membranes
  - Atypical or abnormal fetal heart rate pattern (fetal tachycardia, bradycardia or decelerations)

Fall, abdominal trauma, MVA: interventions

If a patient calls and reports ANY KIND of trauma, you have to tell her to come for 4 hours of FHRM

- ❑ Assess severity of trauma (mild, moderate, severe)
- ❑ Maternal assessment and therapy takes priority over fetal care.
- ❑ Rapid assessment of fetal viability may help in maternal management (Mieghem et al., 2013)
- ❑ Have emergency room stabilize or resuscitate the mother (as per protocol)
- ❑ Position the patient in left lateral tilt or manual displacement of the uterus,
- ❑ Optimize maternal circulation and facilitate resuscitation (Mieghem et al., 2013)
- ❑ O2 supplementation if needed (i.e. maternal oxygen saturation < 95%)
- ❑ Adequate fetal oxygenation.

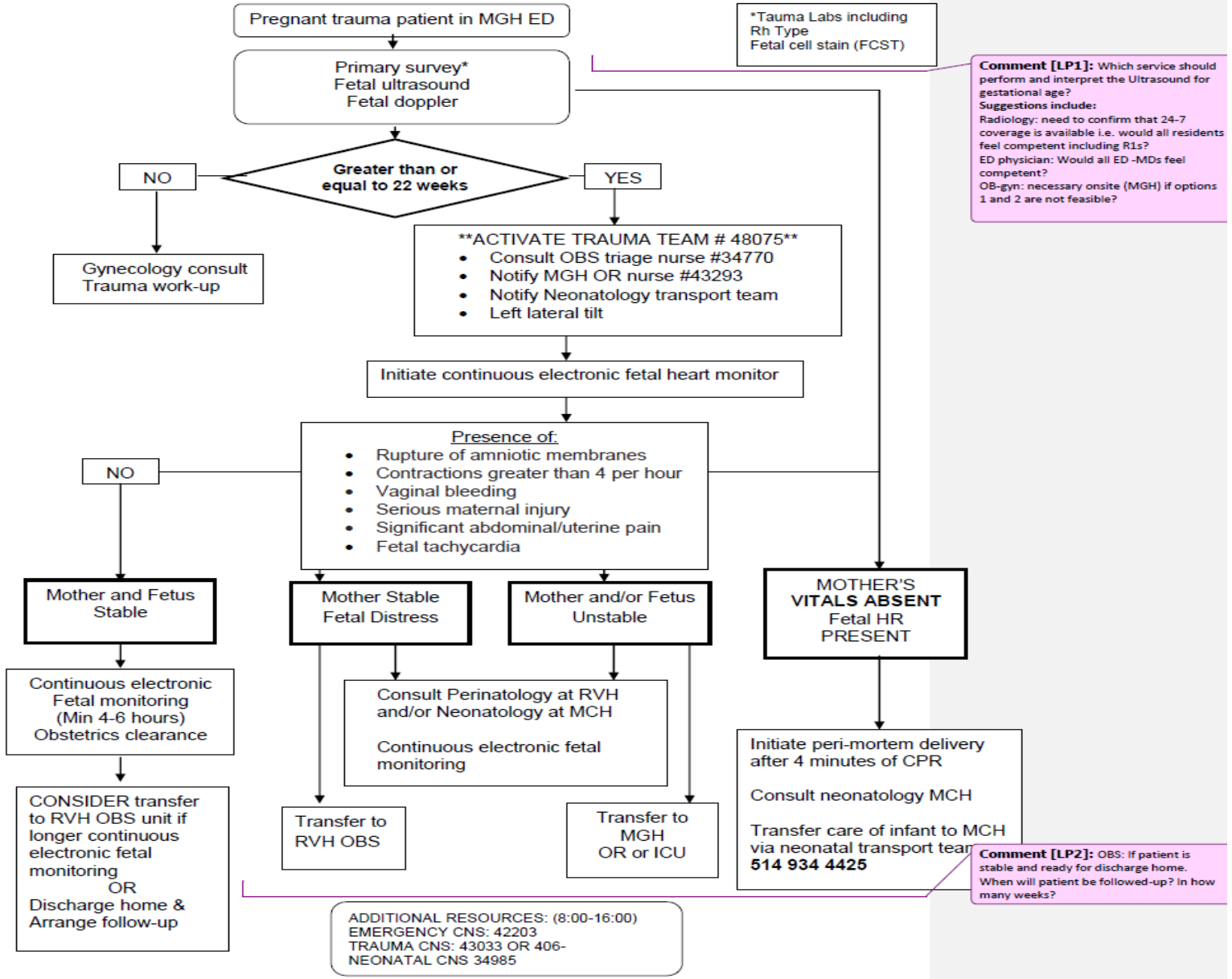
Fall, abdominal trauma, MVA: interventions

- ≥ 23 weeks:
  - EFM for 4 hours
  - Rule out PTL
  - Rule out abruptio
  - May prolong monitoring up to 24 hours
- < 23 weeks:
  - Doptone
  - May be necessary to keep monitor as per FHSL guidelines (BCPHP, 2009).
  - Monitor contraction, assess abdominal tone and vaginal bleeding

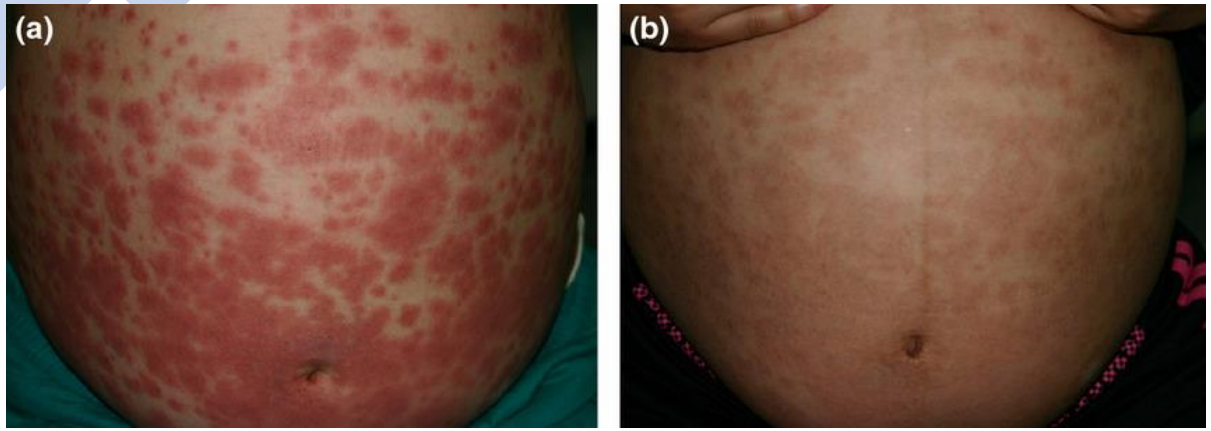
Fall, abdominal trauma, MVA: interventions

- ❑ Assess the circumstance of the trauma
- ❑ Evaluate neurological signs if a head trauma occurred
- ❑ Assess biopsychosocial state
    - Rule out domestic violence
    - Absence of partner
- ❑ Careful documentation (fetal well-being, interactions, observation) for legal purposes (Venu et al., 2015)
- ❑ Assess maternal and fetal well-being and gauge severity of trauma (mild, moderate, severe: refer to emergency algorithm)
- ❑ Verify the RH status (Md to consider Winrho)
- ❑ Readjust the OTAS PRN
- ❑ Document your evaluation, results and interventions
- ❑ Draw bloods for:
    - ❑ **Type and screen and Feto-maternal QT**
    - ❑ **CBC + Coags if active bleeding**

Algorithm for the Management of Pregnancy in Trauma



Other complaints



PUPPP: Pruritic Urticarial Papules and Plaques of Pregnancy

- Most common gestational dermatosis
- PUPPP usually affects primigravidas in their third trimester of pregnancy, less frequently in the immediate postpartum period, and has no tendency for recurrence in subsequent pregnancies
- The cause of pruritic urticarial papules and plaques of pregnancy is still unknown
- The rash consists of itchy small erythematous and edematous papules and plaques usually first start in the stretch marks. The eruption spreads over a matter of days, to the trunk and the extremities, but rarely involves the face, palms, or soles.
- Routine laboratory tests are within normal limits in patients with PUPPP. Generally, PUPPP is not an indication for early delivery.

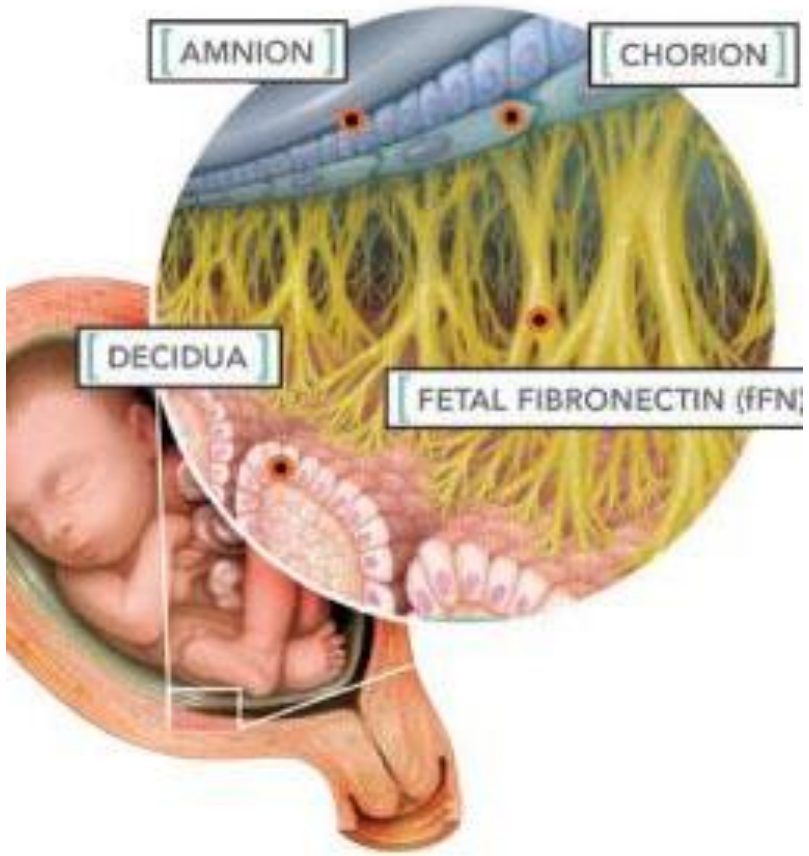
ICP: Intrahepatic cholestasis of pregnancy

- Most common liver disorder in pregnancy (↑ serum bile acids and other liver function tests)
- Usually occurs late 2nd and early 3rd trimester of pregnancy
- Most common complaint is a generalized intense itchiness in palms and soles, typically worse at night
- Other symptoms : nausea, anorexia, fatigue, right upper quadrant pain, dark urine, and pale stool
- Associated with an increased risk of adverse obstetrical outcomes like IUFD
- The pathophysiology of ICP is still not completely understood (genetic susceptibility, hormonal, and environmental factors ??)
- Usually IOL at 39 weeks

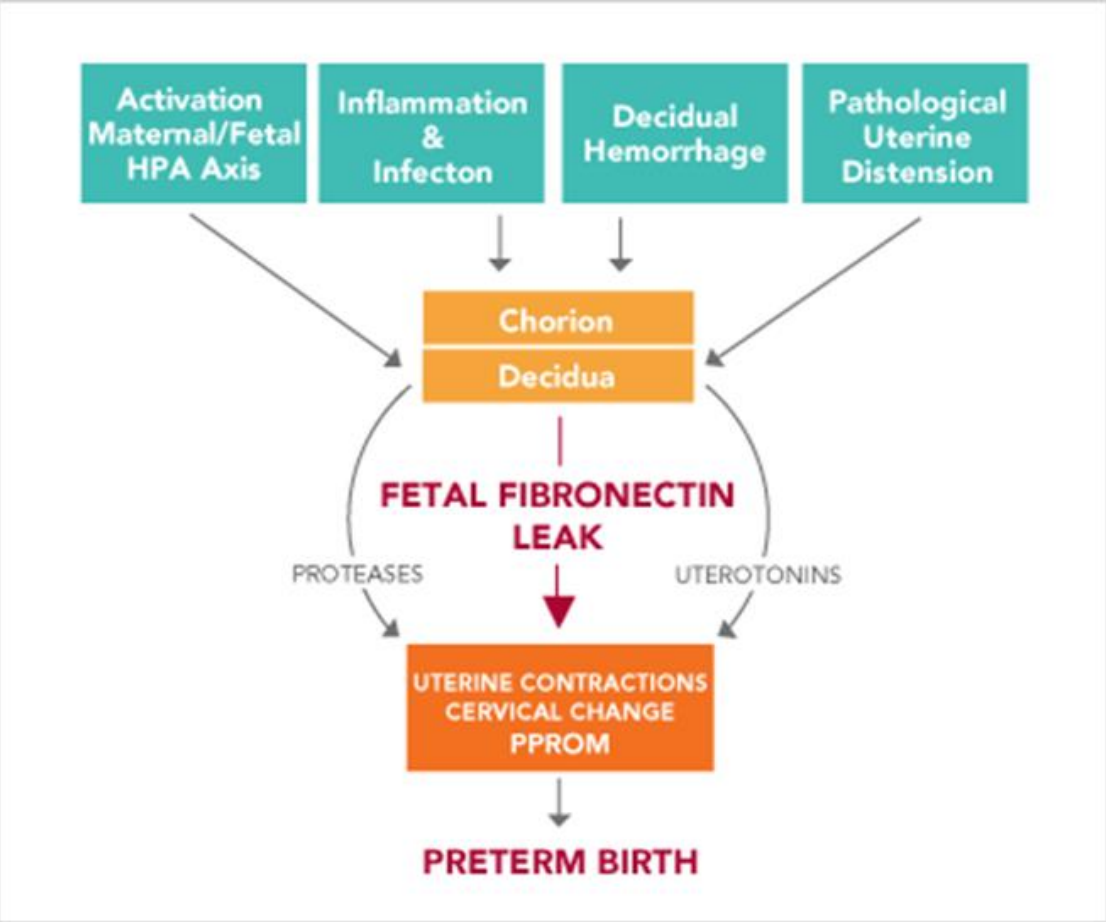
Common tests performed in triage

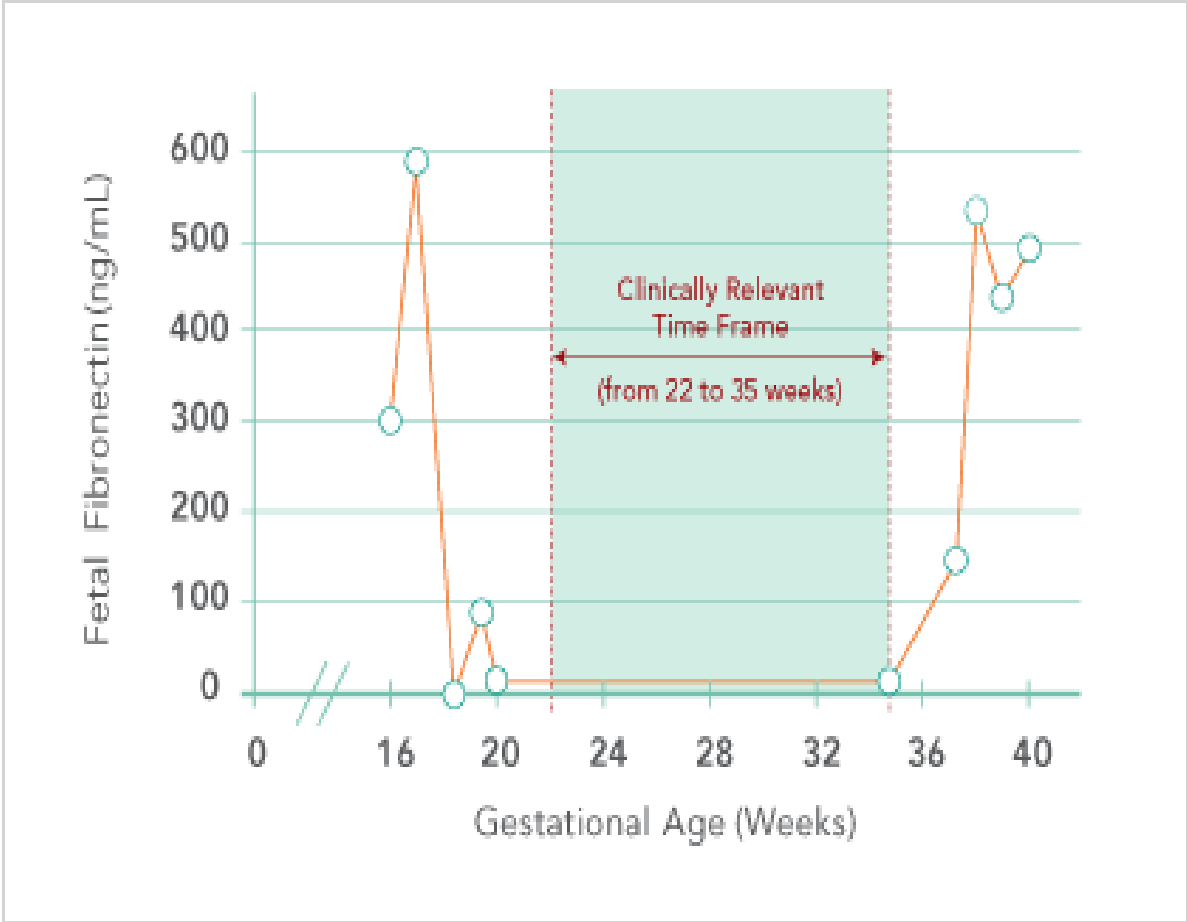
Fetal Fibronectin (fFN)

- Fetal fibronectin is a glycoprotein at the maternal-fetal interface.
- In a normal pregnancy, fFN should be almost undetectable in vaginal secretions from weeks 22 to 35. Its presence in vaginal secretions is a predictor of risk for preterm birth.
- Released in response to inflammation or separation of amniotic membranes from the decidua
- Strongly associated with preterm labour after 24 weeks gestation



Fetal Fibronectin (fFN)





It is normally found in cervico-vaginal secretions before 22 weeks gestation and virtually never found between 24 and 34 weeks gestation unless the cervix has undergone premature effacement and dilatation

Fetal Fibronectin: recommendations

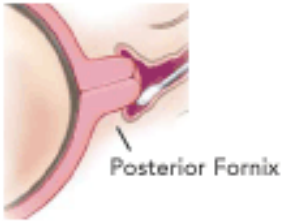
Indications for fFN testing	Contraindications for fFN testing
▪ GA > 24 weeks and < 34 weeks ▪ Threatened PTL ▪ Intact amniotic membranes ▪ Established fetal well-being ▪ Cervix < 3 cm dilation ▪ Intended administration of antenatal corticosteroids ▪ Cervical Length ≥20 mm and ≤ 30 mm	▪ GA <22 weeks or >35 weeks; or ▪ PPROM (preterm premature rupture of membranes) ▪ Cervical cerclage ▪ Active pvb, suspected or known placental abruption or placenta previa. ▪ V.E. or sexual intercourse in the last 24 hours ▪ Cervical Length ≤20 mm or ≥ 30 mm ▪ Advanced cervical dilation (≥ 3 cm)

- ❑ All women presenting with one or more signs/symptoms of threatened preterm labour between 24 and 34 weeks gestation may have fFN testing performed.

- ❑ Fetal Fibronectin testing is not appropriate for use in the absence of symptoms of preterm labour as a means of reassurance.

Fetal Fibronectin: Specimen collection

- **The specimen should be collected prior to a digital cervical exam, collection of culture specimens or vaginal probe ultrasound exams.**
- Swab is to be lightly rotated across the posterior fornix of the vagina for 10 seconds.
- Swab should be identifier with a stamp of patient's hospital card and sent with a manual requisition. If ordered in OACIS, no sticker will come out.

STEP 1	Collect specimen prior to digital examination or manipulation of the cervix to avoid sample contamination.	
STEP 2	During speculum exam, lightly rotate swab across posterior fornix of the vagina for 10 seconds to absorb cervicovaginal secretions.	
STEP 3		Remove swab and immerse tip in buffer. Break the shaft at the score even with the top of the tube.
STEP 4	Insert the swab shaft into the hole inside the tube cap and push down tightly over the shaft, sealing the tube with a click. Ensure the shaft is inserted securely to avoid leakage. Label, and send fetal fibronectin sample to a lab near you.	

Fetal Fibronectin: Results

Specimen Results:

- Will be available in 20 minutes to 1 - 2 hours (Lab)

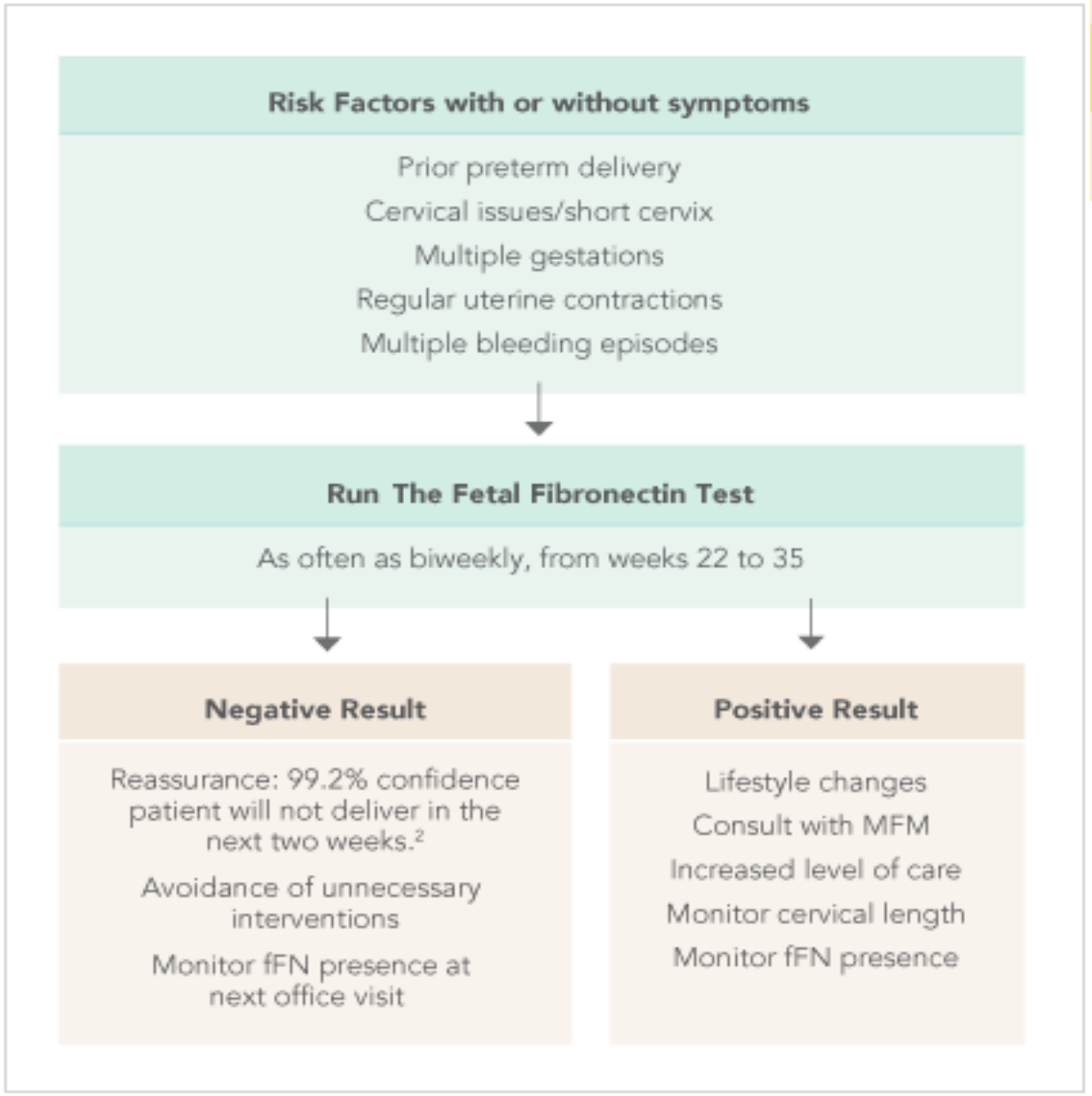
Negative test result (< 50 ng/ml):

- Indicates that ≥ 95% chance that the birth is not likely to happen within 7-14 days.
- Reassessment should be done within 7-14 days with ongoing education with the woman regarding signs and symptoms of preterm labour.

Positive test result (≥ 50 ng/ml):

- Indicates a 16-17% likelihood of preterm birth within the next seven to 14 days
- Preterm birth less than 37 weeks was significantly decreased with management based on knowledge of FFN results
- False positive : assess if patient had intercourse/VE/vaginal probe u/s in the last 24hours

A negative test has a high predictive value for delivering more than seven days after presentation



PPROM & PROM : Diagnostic tests

1.**NITRAZINE**: If positive, paper will turn to BLUE or GREEN (alkaline pH of the amniotic)

If negative, paper will be dark yellow

2.**POOLING**: Visual pooling of clear fluid in the posterior fornix of the vagina or leakage of fluid from the cervical os (during speculum exam)

3.**FERNING:** Microscopic ferning of the amniotic fluid. Visualized under a microscope - presence of a “Ferning”pattern.

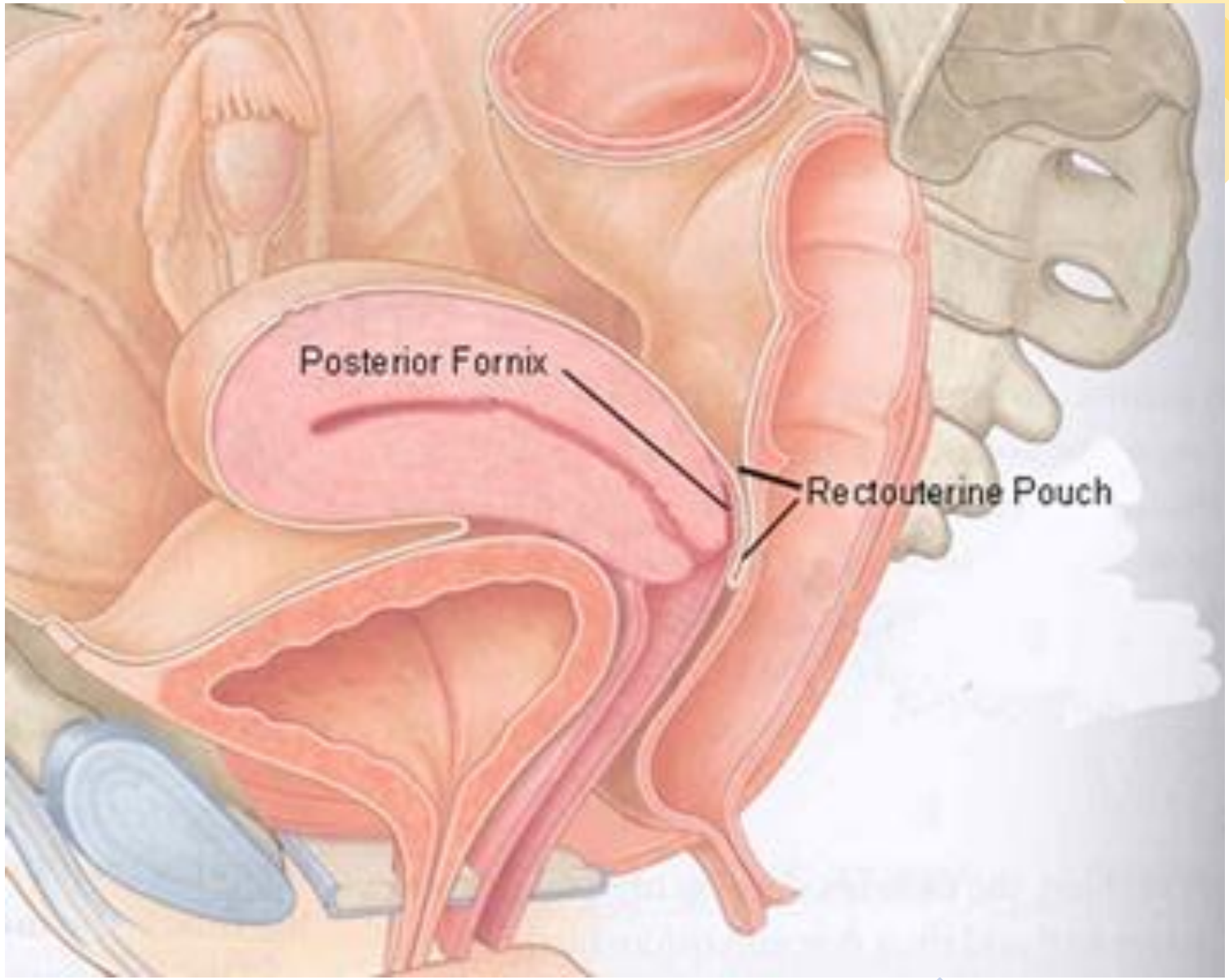
4.**AMNISURE** : The most reliable test (and the most expensive !)

Nitrazine paper: pH testing of fluid

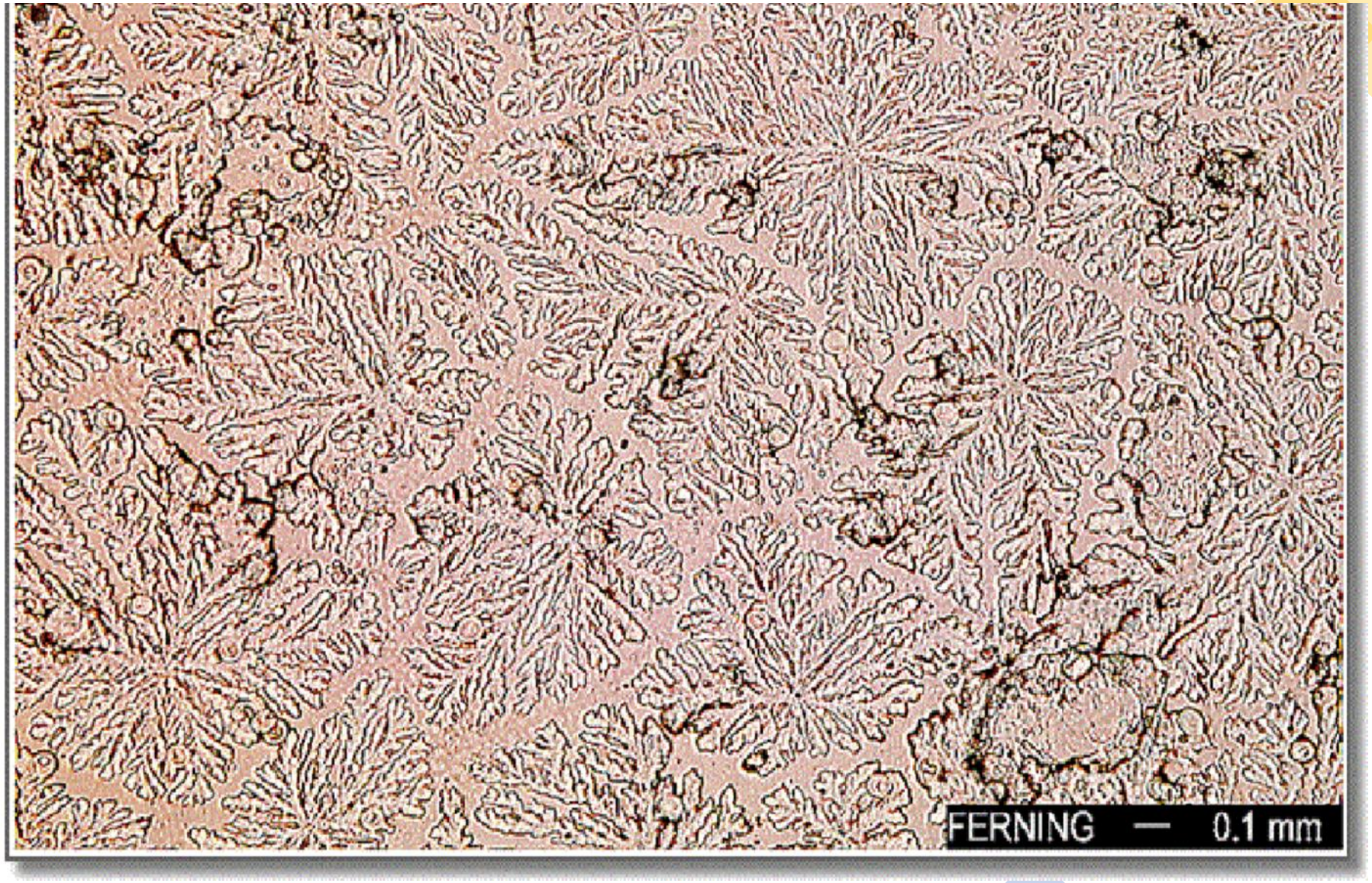
- This test is non-specific
- paper changes from **yellow → dark blue** or **green** when in contact with a **pH above 6.5 (**During pregnancy, the normal vaginal pH is 4.5 to 6.0)

- Amniotic fluid pH is 7.1 to 7.3. False positive results can occur d/t presence of blood, vaginal infections, alkaline urine and semen

Pooling



Ferning



AmniSure® INTERNATIONAL LLC

AmniSure® ROM Test Procedure

1. Take the solvent vial by its cap and shake well to make sure all liquid in the vial has dropped on the bottom. Open the solvent vial and put it in a vertical position.

2. To collect a sample from the surface of the vagina use the sterile polyester swab provided. Remove the sterile swab from its package following instructions on the package. The polyester tip should not touch anything prior to its insertion into vagina. Hold the swab in the middle of the stick and, while the patient is lying on her back, carefully insert the polyester tip of the swab into the vagina until the fingers contact the skin no more than 2-3 inches (5-7 cm) deep. Withdraw the swab from the vagina **after 1 minute.**

3. Place the polyester tip into the vial and rinse the swab in the solvent by rotating for one minute.

4. Remove and dispose of the swab.

6. Insert the white end of the test strip (marked with arrows) into the vial with solvent. Strong leakage of amniotic fluid may make the results visible early (within 5 minutes), while a very small leak will take the full 10 minutes.

7. Remove the test strip if two stripes are clearly visible in the vial or after 10 minutes sharp. Read the results by placing the test on a clean, dry, flat surface. Do not read or interpret the results after 15 minutes have passed since inserting the test strip into the vial.

Interpretation of Results:

One line, NO MEMBRANE RUPTURE:

Two lines, THERE IS A RUPTURE:

No lines, Test IS INVALID:

The darkness of the stripes may vary. The test is valid even if the stripes are faint or uneven. Do not try to interpret the test result based on the darkness of the stripes

Amnisure

Collecting sample:

- 1 min. for saturation of swab

Diluting:

- 1 min rotation in vial

Testing:

- within 10 min. of dilution

Running test:

- remove test strip from vial if 2 lines are visible or after 10 min. sharp.

Reading test:

- do NOT read after 15 min.

Common cultures done in triage

- ❑ Vaginal culture
- ❑ Chlamydia-neiss.gonorrhea PCR – Vaginal, can be done in urine
- ❑ Mycoplasma/ureaplasma culture
- ❑ Group B Strep screen – Vaginal-Rectal
- ❑ Urine bacterial culture

You can anticipate that most patients with suspected PPROM or TPTL will require : urine analysis + urine culture to r/o the cause of PPROM/TPTL

Culture collection – Nurse’s role

- Help physician gather necessary material (speculum, gloves, cultures swab and tubes)
- Ensure comfort of patient
- Assist the physician during culture collection
- Order in eRequisition
- Apply the labels and send to the lab
- Document what cultures were done in CPN

Don’t forget : Collective orders

- ❑ PET work up for patients presenting with signs and symptoms of PET
- ❑ Coag/CBC/type and screen or Crossmatch for patients presenting with vaginal bleeding
- ❑ IHCP work up for patients presenting with excessive itchiness
- ❑ U/a + U/c for patients presenting with UTI symptoms

Don’t forget : you are also carrying the triage phone !

- ❑ **Every triage call must be documented in patient’s chart on CPN**
- ❑ Patient identification (name, MRN). Patient over 18 weeks who have done their preadmission can be found on CPN. If not, use pt info to create file in order to chart (see next slide)
- ❑ Patient’s doctor: if patient not followed at RVH, redirect to own hospital or 811
- ❑ Obstetrical information: Gravida/Para, EDC/GA
- ❑ Evaluation of chief complaint, data, symptoms
- ❑ What the patient have done prior to call
- ❑ Nursing diagnostic and suggested interventions
- ❑ Appropriate teaching or recommendation
- ❑ Follow-up plan (TCI, to monitor and call back, f/u with OB or GP, …)
- ❑ Verify patient understanding

Troubleshooting : How to find or create a patient

Find:

1. Search with 3 first letters
2. Search by MRN (v…)
3. If two files for a patients: notify AHN

Create patient's file (only if pt is followed at MUHC)

1. V# … (e.g. V9894621)
2. CAPS LETTER (LASTNAME)

CLICK *System* on the Menu.
CLICK *Create Patient Record.*
The screen with beds in triage or BC will be displayed.
CLICK on the desired bed (it will highlight it dark blue).
CLICK *Select.*
A pop up screen will appear. Type in the patient's ID (blue MRN number) on the first line of the Create a Patient Record screen.
TAB.
Type in the patient's name on the second line. Format: Last name, First name, MI.
Click *OK*
If ever the pt. name was omitted during *create a pt record* all one has to do is go to pt. administration, CLICK change info and the CPN system will allow you to make corrections.

Case scenarios

Case scenarios

1. 32 y/o, G2P1L1 @ 40+4 weeks, presents with persistent headaches despite taking Tylenol. She appears swollen, you even notice the presence of facial edema.

2. A patient presents herself stating she has been sent from the OBS clinic for prolonged monitoring.

3. 26 y/o, G2P1L0 @ 40+2 weeks, with cramps, no loss of fluid, decreased fetal movement, no vaginal bleeding.

4. A patient comes sitting in a wheelchair, accompanied by her partner. She is breathing heavily and holding her abdomen. Her partner tells you this is their fourth baby and that she is 39 weeks today.

5. You triage a patient at 36 weeks complaining of excessive itchiness on her hands and feet mostly. Her NST is reassuring. You inform the resident about her, but she/he is busy in the OR.

6. A patient calls you stating she noticed some clear fluid leaking last time she went to the bathroom. What do you want to discuss with her ?

Give an OTAS score to each patient and justify it.
Identify what would be your nursing interventions.

Case scenarios

Five patients present to OB triage within 10 minutes.

1. 36 weeks, gestational diabetic, presenting for a booked NST
2. 33 weeks, leaking fluid, contracting every 3 minutes
3. 38 weeks, no fetal movement for the past 12 hours
4. 28 weeks presenting with severe right sided pain and hematuria
5. Postpartum Day 5 with L breast redness and chills

Which patient do you see first ?

What important questions would you ask the other patients that could help you prioritize them ?

Postpartum case scenarios

1. A 40 years old G3P3, 10 days post-partum (PP#10) presents with difficulty breastfeeding and extreme fatigue. She had a difficult delivery resulting in an emergency c-section. She tells you she doesn't know how she is going to make it through this week. What do you need to assess ?

2. A 35 years old G1P1, 8 days post-partum (PP#8) presents with a persistent headache. What questions do you want to ask her for further assessment ?

3. A 33 years old G3P2 presents with abdominal pain with purulent wound leakage. She delivered via c-section 5 days ago (PP#5) . She has fever at 39.0. What are your first nursing interventions ?

4. A 38 years old G1P1 calls you. She delivered 9 days ago (PP#9) and reports breast redness and pain. What questions do you want to ask her over the phone ?

Give an OTAS score to each patient and justify it.
Identify what would be your nursing interventions.

Postpartum case scenarios

7. A 39 years old had a difficult delivery with retained placenta. She presents with persistent vaginal bleeding and tells you she just passed a small blood clot. Her vitals are stable. What are your first questions ?

8. The ER triage nurse calls you to tell you she is sending the paramedics to the OB triage. They are bringing a woman who had a precipitous delivery at home. The baby is stable, STS with mom. What questions do you want to ask the ER nurse ?

9. A young woman presents herself to triage, she delivered 4 weeks ago. She has a flat affect and states she left her baby with her partner because she feels too tired to care for the baby. Your triage rooms are full, and you have 2 patients with ongoing NSTs. How do you triage this patient and what are your first interventions ?

10. A G2P2 is 5 weeks PP. She delivered via cesarean section. She calls you because she recently noticed some lower leg swelling and redness. What questions do you want to ask her ?

Give an OTAS score to each patient and justify it.

Identify what would be your nursing interventions.

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