Pregnancy: The CME I Didn’t Know I Needed

Learning Objectives

- Describe the difference in early care between singleton and multiple gestations
- Define FPIAP and distinguish it from other adverse reaction to cow's milk
- Identify management of mastitis in breastfeeding patients

Twin Pregnancy in Primary Care

Patient – 30 year old female

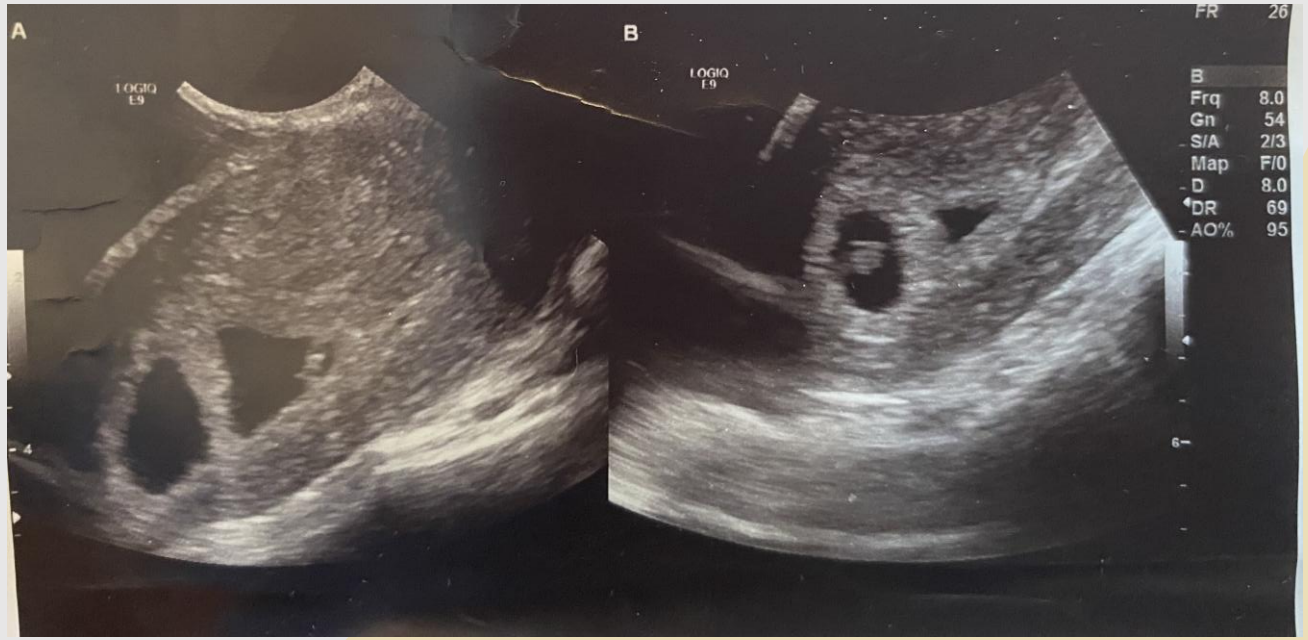
Positive pregnancy test

LMP 6 weeks ago

++ Nausea

Ultrasound

“LIVE DICHORIONIC DIAMNIOTIC TWIN PREGNANCY WITH CRL CORRESPONDING TO GA 7+2 FOR TWIN A AND 7+0 FOR TWIN B "



Now what?!

Patient sees her ultrasound report online and books an appointment with you to review what this means.

She wants to know how this happened?

Risk factors for twin pregnancy

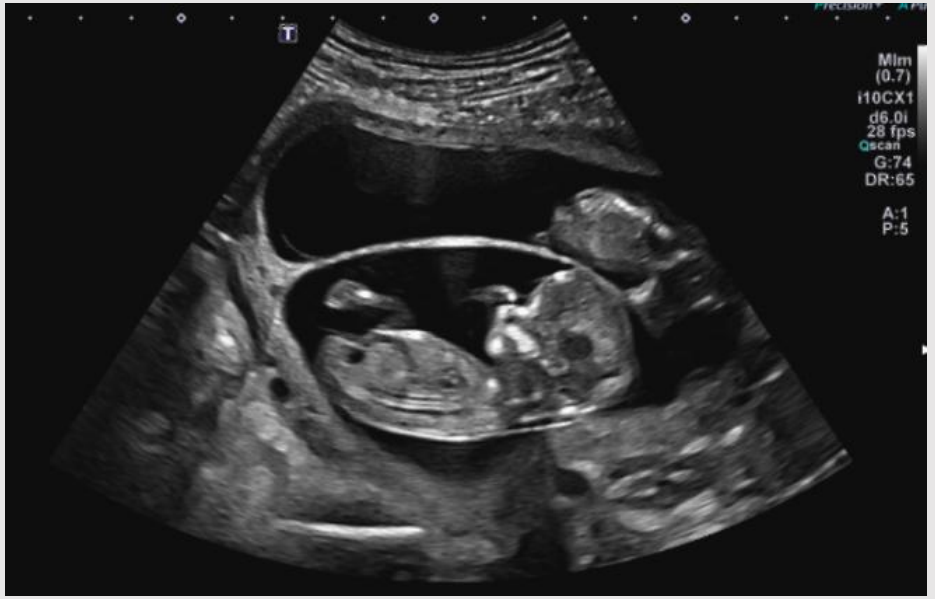
- IDIOPATHIC
- ASSISTED REPRODUCTIVE TECHNOLOGY
- INCREASING PARITY
- MATERNAL AGE
- FAMILY HISTORY OF DIZYGOTIC TWINS
- PEOPLE WITH OBESITY OR WHO ARE TALL

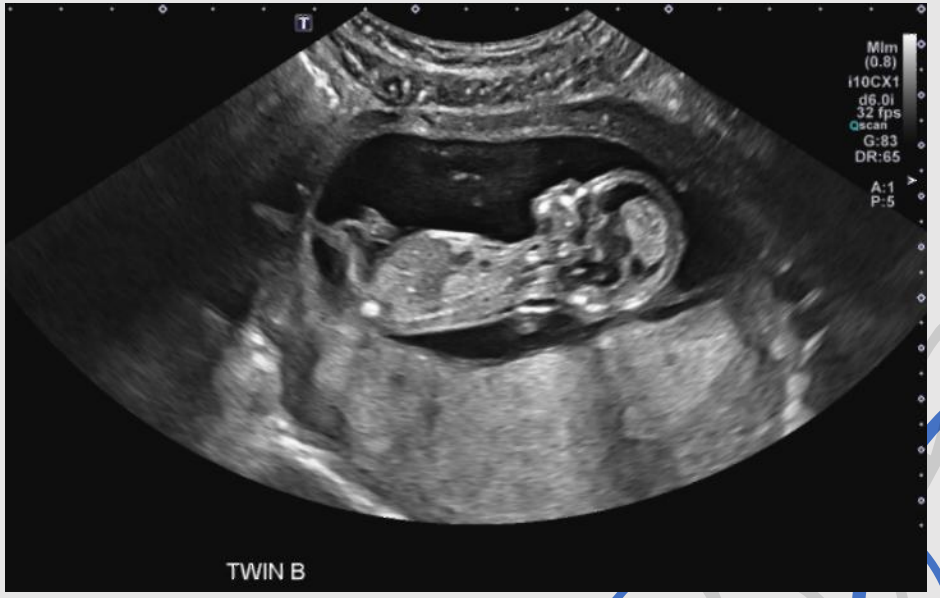
What are my next steps?

- DETERMINATION OF CHORIONICITY
  - Dichorionic diamniotic – level 2 appropriate
  - Monochorionic diamniotic – level 2 appropriate
  - Monochorionic monoamniotic – tertiary care center
- DUE DATE
  - Based of CRL of larger twin

Prenatal Screening

- Ineligible for eFTS, MSS
- NIPT OHIP Covered
  - Harmony (Dynacare)
    - As early as 10 weeks
    - Cannot determine zygosity
    - Y chromosome present or not
  - Panorama (Lifelabs)
    - As early a 9 weeks
    - Determines zygosity
    - Gender of each fetus
- NT ultrasound
  - Reassess chorionicity at this ultrasound





Pre-Eclampsia Prevention

Initiation of ASA 162mg qhs between 12-16 weeks

Table 8. Clinical risk assessment for preeclampsia and recommendations for prophylactic acetylsalicylic acid (ASA)

Risk level	Risk factors	Recommendation
High	• History of preeclampsia, especially when accompanied by an adverse outcome • Multifetal gestation • Chronic hypertension • Type 1 or 2 diabetes • Renal disease • Autoimmune disease (e.g., systemic lupus erythematosus, antiphospholipid syndrome)	Recommend low-dose aspirin if the patient has ≥1 of these high-risk factors.
Moderate	• Nulliparity • Obesity (BMI >30 kg/m^2) • Family history of preeclampsia (mother or sister) • Sociodemographic characteristics (e.g., African American race, low socioeconomic status) • Age ≥35 years • Personal history factors (e.g., low birth weight or small for gestational age, previous adverse pregnancy outcome, >10-year pregnancy interval)	Consider low-dose aspirin if the patient has more than 2 risk factors.
Low	BMI <30 kg/m^2, no other risk factors	Do not recommend low-dose aspirin.

BMI: body mass index.

I was reading about the risk of pre-term birth. Should I go on progesterone?

- Progesterone indications same as singleton pregnancies
- No evidence to support use in those without a prior history of pre-term delivery
- Risk of preterm birth
  - 7% of didi and 14% of modi twin pregnancies will deliver before 32 weeks
  - Less than 50% will make it beyond 37 weeks
- Anatomy Scan
  - Likely to be connected with OB at this point
  - But if you are arranging anatomy scan – Anatomy + TV CL

Does this mean I am eating for 3??

Recommended increase in caloric intake by ~600kcal/day (300 is the recommendation for singletons)

Recommended weight gain

- •BMI 18.5 to 24.9 kg/m2 (normal weight) – Weight gain 37 to 54 lb (16.8 to 24.5 kg).
- •BMI 25.0 to 29.9 kg/m2 (overweight) – Weight gain 31 to 50 lb (14.1 to 22.7 kg).
- •BMI ≥30.0 kg/m2 (obese) – Weight gain 25 to 42 lb (11.4 to 19.1 kg).Supplements

Supplementation

- Prenatal Vitamin with folic acid 1mg per day
- Iron supplementation when able to tolerate
  - Ferrous fumarate 300mg q2days
- Calcium target 2500mg/day

Other common questions

Delivery timing around 36-38 weeks in the absence of other risk factors

Labour is possible if presenting twin is cephalic

Expect ultrasounds q2-4 weeks depending on risk factors

Will I have twins again??

- Monozygotic twin risk is baseline (1 in 250)
- Dizygotic – higher chance

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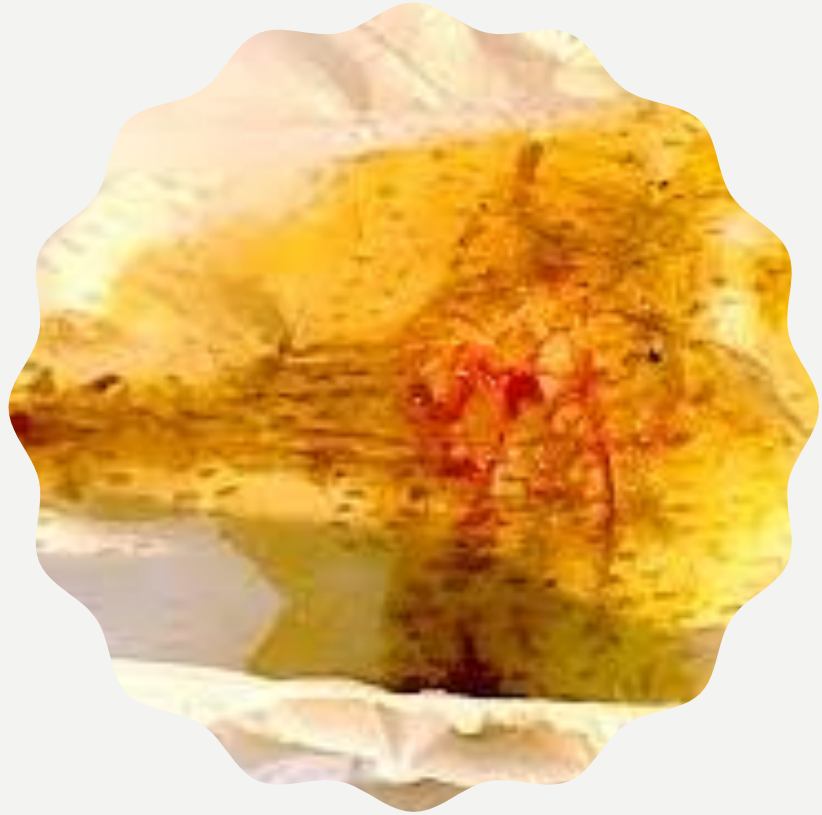
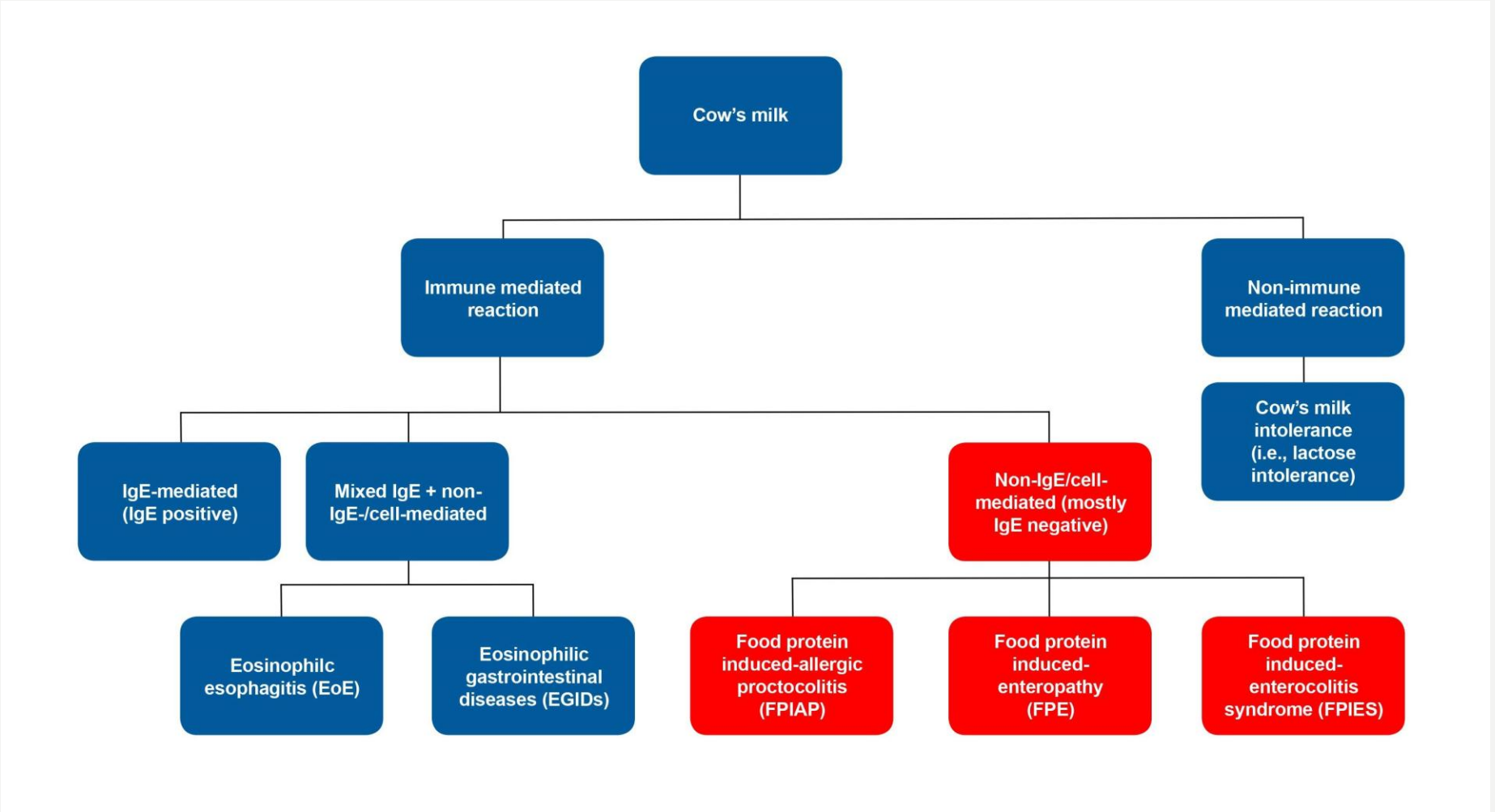


DIFFERENTIAL DIAGNOSIS

- Recent Rotavirus vaccine administration
- Cow's milk protein allergy
- Food Protein Induced Enterocolitis/Food Protein Induced Enteropathy
- Anal fissure/Diaper Rash
- Viral enteritis
- Intussusception
- NEC
- Swallowed maternal blood

COWS MILK PROTEIN ALLERGY


Cow's milk
Immune mediated reaction
Non-immune mediated reaction
Cow's milk intolerance (i.e., lactose intolerance)
IgE-mediated (IgE positive)
Mixed IgE + non-IgE-/cell-mediated
Non-IgE/cell-mediated (mostly IgE negative)
Eosinophilc esophagitis (EoE)
Eosinophilic gastrointestinal diseases (EGIDs)
Food protein induced-allergic proctocolitis (FPIAP)
Food protein induced-enteropathy (FPE)
Food protein induced-enterocolitis syndrome (FPIES)

NON-IGE MEDIATED

FPIAP (Cows milk protein allergy)	FPE (Food Protein Induced Enteropathy)	FPIES (Food Protein Induced Enterocolitis)
Symptoms: Streaks of blood in stool Status: Healthy, well appearing infant Diagnosis: Clinical	Symptoms: diarrhea, emesis, abdominal distention Status: malabsorption and failure to thrive Diagnosis: labs and gastroscopy to diagnosis; need to distinguish from other causes of FTT	Symptoms: Repetitive diarrhea and vomiting typically within 1-4 hours after ingestion Status: Dehydration, shock, acidosis Mimics: gastro, anaphylaxis, sepsis Diagnosis: Clinical, can r/o IGE mediated with skin-prick

MANAGEMENT

- Breastfeeding mothers
  - Avoid triggers
    - Dairy and soy are most common
      - This includes all mammal milk!!
    - Egg, corn, wheat
  - Infant often grows out by 6-12 months
    - Recommendation is to trial introduction around 9-12 months
    - Can introduce either directly to baby or in mom's diet
- Formula
  - Extensively hydrolyzed formula
  - Consider Amino Acid formula if ongoing symptoms

MASTITIS

"30 YEAR OLD PATIENT PRESENTING WITH FLU LIKE SYMPTOMS AND A SORE BREAST"

MASTITIS VS PLUGGED DUCTS

Mastitis

- Unilateral symptoms
- Red, hot, swollen.
- Possible red streaks and/or shiny breasts.
- Intense pain.
- Flu-like symptoms, e.g., chills, aches, fatigue.
- Fever

Plugged Duct

- Typically unilateral
- Painful
- Absence of systemic symptoms
- Misnomer -> swelling around the ducts causing disruption in milk flow

WHY ME?

- Hyperlactation
- Pump use/Haaka
- Weaning
- Incomplete breast emptying
- Sore cracked nipples
- External Breast Pressure

“I HAVE BEEN MASSAGING LOTS AND USING WARM COMPRESSES AND ITS NOT GETTING BETTER “

MASTITIS TREATMENT

- Ice
- Physiologic emptying
- NSAIDs/Tylenol
- ?sunflower/soy lecithin
  - 2400-3600mg (2-3 capsules) BID

- If no improvement after 24-48 hours
  - Cephalexin 500 mg QID x7-10 days
  - Cloxacillin 500 mg QID x10-14 days (2ndline)
  - Clindamycin 300-450 mg TID x10 days ? (if beta-lactam sensitivity or allergy)
  - Amoxicillin-clavulanic acid 500 mg BID x7-10 days

The End

REFERENCES

- https://www.uptodate.com/contents/twin-pregnancy-overview?search=twin%20pregnancy&topicRef=130561&source=see_link#H2183551052
- https://www.uptodate.com/contents/twin-pregnancy-routine-prenatal-care?search=twin%20pregnancy%20routine%20care&source=search_result&selectedTitle=1%7E150&usage_type=default&display_rank=1
- https://lacted.org/iable-breastfeeding-education-handouts/managing-plugged-ducts/
- https://cps.ca/en/documents/position/cows-milk-protein-allergy
- https://www.toronto.ca/wp-content/uploads/2017/11/9619-tph-breastfeeding-protocol-7-mastitis-2013.pdf
- https://lacted.org/shop/core-content-breast-mass-imaging/