**PREGNANCY ORAL HEALTH CASE**

**Learner Version**

**Learning Outcomes (HRSA 2014):**

* **Risk Assessment**: Identify factors that impact oral health and overall health
* **Oral Health Evaluation**: Integrates subjective and objective findings based on completion of a focused oral health history, risk assessment and performance of oral screening.
* **Preventive Intervention**: Recognize options and strategies to address oral health needs identified by a comprehensive risk assessment and health evaluation.
* **Communication and Education**: Facilitating providers understanding of the oral and systemic relationships that can be addressed during all medical and dental visits.
* **Interprofessional Collaborative Practice**: Shares responsibility and collaboration among health care professionals in the care of patients and populations with or at risk for oral disorders.

**Patient Population:** Pregnancy

**Case Presentation:**

* **Demographics:** 28 year old Hispanic female working part time in a clothing factory.
* **Chief Concern**: Routine OB visit. Patient’s chief concern is pain in her lower front teeth.
* **Medical/Obstetrical History**: Ingrid is G2P1 (multiparous; second pregnancy) at 30 weeks gestation with a singleton pregnancy. Her first delivery resulted in a preterm vaginal delivery at 32 weeks gestation following preterm labor with no clear etiology. Prenatal labs and 18 week ultrasound were normal during this pregnancy. She is allergic to amoxicillin and was diagnosed with gestational diabetes 3 weeks ago. A review of her diet history reveals suboptimal nutrition practices with Mountain Dew being her favorite drink. She has seen a dietitian and is working on improving her diet to control blood sugar levels and takes glyburide 2.5mg bid. Ingrid is on intramuscular 17-hydroxy progesterone weekly to decrease the risk of recurrent preterm delivery and is taking acetaminophen as recommended by her prenatal provider when she experiences round ligament pain. A brief dental history reveals she has not seen a dentist in several years.
* **Social History**: Ingrid recently immigrated to the United States from Guatemala. Because she does not have a lot of time at work and finances are tight, she often skips meals and snacks frequently on inexpensive sugary snacks/drinks at work.
* **Lab findings**:Her initial 50g glucose tolerance test (GTT) was 180 mg/dL. Follow up 3 hour OGTT was 100/190/140/100. All other prenatal labs were within normal limits.
* **Oral exam**: Swollen gums, tenderness upon palpation, missing teeth and extensive dental caries (tooth decay).

You decide to refer her to a dentist to address her oral pain.

**Dental Evaluation:**

* **Dental History**: She reports her last dental visit occurred 4-5 years ago in Guatemala. Since living in the United States, she has not sought dental care because of finances. She does not brush her teeth routinely due to the lack of importance placed on oral hygiene as a child/adult. Her dental pain is waxing and waning but has been waking her up at night for the last 2 days. She is taking acetaminophen 500mg 1-2 tabs 4-5 times a day. There are currently no systemic signs of infection (i.e. fever, malaise, etc.).
* **Clinical Examination**:
  + Extraoral: Afebrile, no evidence of facial swelling and temporal mandibular joint was within normal limits.
  + Intraoral:Soft tissue examination reveals a dental abscess present in the mandibular anterior region facial to central incisors. Gingival recession and gingivitis are present (bleeding gingiva when probing). Hard tissues shows the permanent dentition with multiple missing teeth and severe dental caries. See photos.

The dentist calls the obstetrical provider to discuss the plan and concerns regarding the amount of acetaminophen being consumed. The dentist questions about management given the gestational diabetes.

**General Questions:**

1. **What are Ingrid’s primary health concerns and needs?**
2. **What are the oral-systemic health issues?**
3. **Identify risk factors that may have contributed to her oral and systemic conditions**.

**Management:**

1. **How would a primary care (non-dental) provider address Ingrid’s chief complaint?**
2. **How should a dental provider address Ingrid’s chief complaint?**
3. **What are the priority issues in managing Ingrid’s chief complaint?**
4. **What should the dental provider consider in treating this pregnant patient in the dental chair to maximize safety and comfort?**
5. **Given Ingrid’s financial limitations, she decides to have the tooth removed instead of undergoing root canal therapy. She experiences post-operative pain and contacts her dentist. The dentist recommends opioids as needed in her case because of her recent overuse of acetaminophen. Do you have any concerns about this recommendation?**

**Case Outcome:**

1. **What is the importance of the interdisciplinary team in addressing the oral-systemic health care needs of the pregnant woman?**
2. **What is the importance of the interdisciplinary team in addressing post-operative pain for the pregnant woman?**
3. **What preventive messages can be linked during pregnancy to promote good oral health for both baby and mother?**

**Discussion:**

* There is a strong relationship between oral and systemic health; pregnancy and diabetes are good examples (Zi, 2015; Matthews, 2002).
* Dental treatment is **safe during all stages of pregnancy.** (Oral Health Care During Pregnancy: A National Consensus Statement 2012).
* Dentists report not always being comfortable with the care of pregnant women (Prada, 2010). Referring all health care professionals to the Oral Health Care During Pregnancy: A National Consensus Statement (2012) and helping to facilitate identifying a dental home rather than simply making a referral is key. The Prenatal Oral Health Program website can serve as a template for interprofessional collaboration ([www.prenataloralhealth.org](http://www.prenataloralhealth.org)) and promotion oral health in the medical home (Quinonez et al., 2013).
* It is important to identify and prioritize strategies to prevent or mitigate risk impact for oral and systemic diseases. Collaboration among health care providers can facilitate this process, particularly if questions arise during pregnancy. Specific to diabetes, making sure glucose is well- controlled before proceeding with elective care. For urgent care, collaborate with prenatal providers to facilitate managing acute needs.
* Oral health literacy can influence an individual’s understanding of health related information and subsequently influence what they know and how they behave (Hom, 2012). In this scenario, low oral health literacy and the lack of coordinated care could have increased the risk of this woman overdosing on acetaminophen to manage her pain.
* It is not simply a matter of surgically addressing dental disease of patients. It is our responsibility to help identify etiology of disease to promote prevention. All primary health care providers can collaborate by implementing appropriate patient-centered preventive oral health interventions as a component of prenatal care. Have obstetrical providers review the ACOG Committee Opinion on this topic.
* There is a strong association between maternal oral health and the child’s oral health, thus emphasizing the importance of health care professionals having a life-course trajectory approach in oral health promotion and disease prevention in clinical practices (Weintraub, 2010).

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