

PERINATAL CARE AND ORAL HEALTH

Lakshmi Mallavarapu, DDS
Terry Reilly Health Services
Boise, Idaho

CE objectives

- Recognize the necessity of Oral Care during Perinatal Period
- Examine and assess teeth and gums of the pregnant patient and make appropriate referral as necessary
- Educate and motivate the pregnant women on dental care and its impact on both her and children health
- Suggest necessary dietary changes to help reduce caries during pregnancy



Outline

- Introduction
- Barriers for Oral Care
- Effects of Pregnancy on Oral Health
- Recommendations for Perinatal care providers and Oral Health Professionals
- Preventive Strategies for Pregnant women



Introduction

- Guidelines by American Academy of Pediatric Dentistry (AAPD)
 - *For both infant and perinatal oral health*
 - *To assist both the pregnant women and the children to prevent oral diseases*
- Guidelines originally developed by the Infant Oral Health Subcommittee of the council on Clinical Affairs and adopted in 2009
- Perinatal period
 - *period around the time of birth*
 - *Beginning with the completion of the 20th through 28th week of gestation and ending one to four weeks after birth*
- Oral health care during perinatal period improves both mother's and infants health

Barriers for Oral Care in Pregnancy

- Common categories
 - *Structural: Availability of providers, fear of law suits and short term patients*
 - *Patient (self): Lack of education and knowledge, transport limitations, child care and work leave issues.*
 - *Physical: Nausea, Vomiting, food cravings*
 - *Financial: Insurances*
 - *Cultural: Myths and misconceptions, such as bleeding is common during pregnancy, pain during dental procedures is inevitable, x-rays are harmful.*

Research shows that the negligence of the oral care in pregnant patient can lead to

- **periodontal diseases,**
- **preterm delivery,**
- **low birth weight babies and**
- **preeclampsia**

Pregnancy and Dental Health

- Dental caries
- Dental erosion
- Epulis (Pregnancy Granuloma)
- Periodontal disease
- Pregnancy gingivitis.

Dental Caries {Tooth Decay}

- Commonly known as tooth decay
- Caused by a breakdown of the tooth enamel
 - *Result of bacteria on teeth that breakdown foods and produce acid that destroys tooth enamel and results in tooth decay*
- Mostly caused by *Mutans Streptococci*
- Pregnancy
- Vertical transmission from mother to child is possible



Early Childhood Caries

- Caries in early childhood result from several factors, some
 - *Acquisition of bacteria - Streptococcus Mutans causing rapid demineralization of Enamel*
 - *Transmittance of Cariogenic bacteria from mother to fetus*
- Prevention: Proper Oral hygiene, dietary counselling , Use of Flouride and regular dental visits.



Periodontal Disease

- Mainly the result of infections and inflammation of the gums and bone that surround and support the teeth
 - *Early stage known as Gingivitis*
 - Gums are red, swollen and bleed
 - *Advanced stage known as Periodontitis*
 - Gums retract away from the tooth, loss of bone and the teeth become mobile



Periodontal disease in expectant mothers can cause risk to newborns

Pregnancy Gingivitis

- Sore and swollen gums due to increase in hormone level
- Increased Hormones → more plaque build up → Gingivitis
- Severity of Gingivitis increases in **Second Trimester**
- Treatment: Brushing and flossing twice a day, routine professional cleanings
 - *Gums should return to normal after delivery*



Periodontitis in Pregnancy

- Occurs due to change and increase in hormone levels of
 - *Prostaglandins*
 - *C-reactive Protein*
- Prostaglandins
 - *Periodontal disease → Prostaglandin levels elevated → Premature delivery*
 - *Result in potential low birth weight infants*
- C-reactive Protein
 - *Periodontal disease → CRP elevation → Preeclampsia and premature birth*
- **Treatment**
 - *Scaling and Root planning, Smoking Cessation, Proper home care*

Dental Erosion



- Irreversible loss of tooth structure
 - *Due to acids without involvement of bacteria*
- Factors
 - *Intrinsic*
 - Reflux of the stomach acids into the Oral Cavity
 - *Occur during Pregnancy or GERD or Bulimia*
 - *Extrinsic*
 - Soft drinks like soda or chemicals
- During Pregnancy
 - *Recurrent Vomiting is called Hyperemesis gravidarum*
 - *Morning sickness due to Nausea and Vomiting*
 - Result in increased acid reflux into the oral cavity
 - ↓
 - Erosion of the Enamel
 - ↓
 - Increased Caries risk

Dental Erosion Treatment

- Erosion is irreversible
- Treatment main goal is **reduction followed by management**
- Recommendations to Patients
 - *Avoid brushing teeth immediately after vomiting*
 - Vomiting exposes the teeth to stomach acids
 - *Rinse with a cup of water containing a teaspoon of baking soda and wait an hour before brushing*
 - *Use a fluoridated toothpaste*
 - *Chew sugarless or xylitol-containing gum*
 - *Eat small amounts of nutritious food throughout the day*

Epulis/Pyogenic Granuloma

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| <ul style="list-style-type: none"> ■ Pyogenic granuloma of gingiva or Pregnancy Tumor <ul style="list-style-type: none"> - <i>Frequently develops in Pregnant women</i> ■ Appearance <ul style="list-style-type: none"> - <i>Non-neoplastic, smooth mass whose surface is red to pink based on the vascularity of the lesion</i> ■ When: <ul style="list-style-type: none"> - <i>May develop during first trimester but incidence increases through seventh month of pregnancy</i> ■ Where: <ul style="list-style-type: none"> - <i>Mostly in anterior gingiva</i> | <ul style="list-style-type: none"> ■ Reason <ul style="list-style-type: none"> - <i>Increased level of Estrogen and Progesterone</i> ■ Treatment <ul style="list-style-type: none"> - <i>Resolve after the return of hormones to normal levels</i> - <i>Some patients do get it excised due to esthetic purposes</i> |
|--|---|

Prenatal Care Providers Guidelines

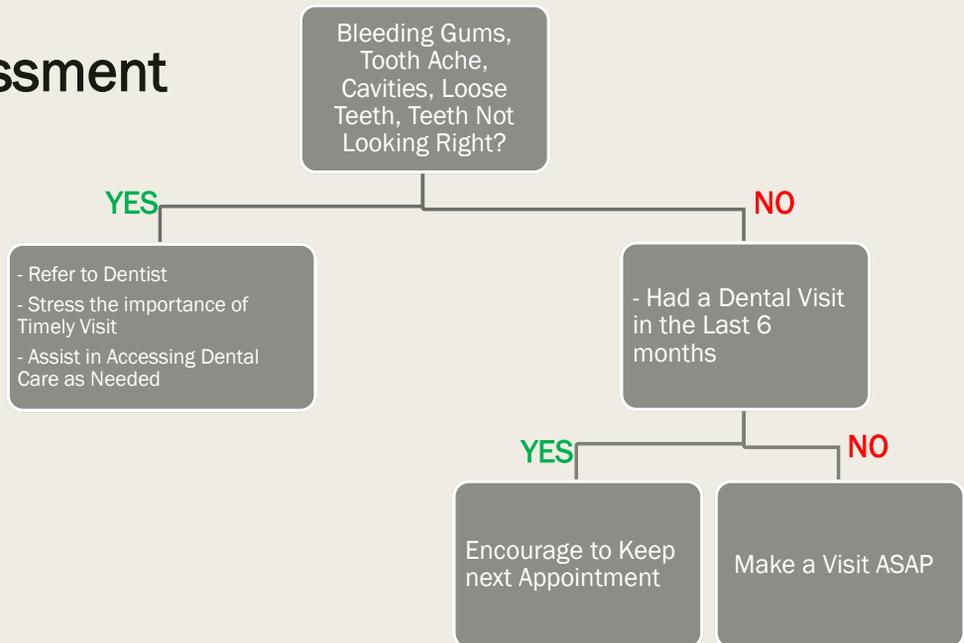
- Integration of prenatal care providers with oral health care professionals
- Some guidelines to prenatal care providers
 - *Assess oral cavity both hard and soft tissues and make referral as necessary to dentist*
 - *Advise all pregnant women to visit a oral health care provider if they haven't in the last six months*
 - *Document whether the expectant mother is under oral health care professional or not*
 - *Share any clinical information with the oral health professionals and respond to any questions they may ask*

During Prenatal Visit



- Conduct assessment to identify patients requiring immediate referral
- Assessment includes pain, previous visits and availability of dental provider
- Examine her soft and hard tissues of the teeth
- Document in her Medical record

Assessment



Oral Health Professional Guidelines

- Plan definitive treatment based on individual oral health considerations including
 - *Chief complaint and History*
 - *Smoking and alcohol use*
 - *X-rays*
- Develop and discuss comprehensive treatment plan including
 - *preventive,*
 - *restorative and*
 - *maintenance care*
- Dental treatment and prophylaxis during Second trimester but definitely before delivery
- Emergency treatment during any time of Pregnancy based on the oral condition

WHAT A PREGNANT WOMEN SHOULD KNOW...

- Dental Treatment during Pregnancy is safe and effective
- Comprehensive exam and X-rays are safe and important for diagnosis and treatment
- Time period between 14th and 20th week (Second Trimester) is ideal
- Elective treatment can be deferred until delivery
- Delay in necessary treatment could result in significant risk to the mother and indirectly to the fetus

Preventive Strategies

- Oral Education
 - *Provide educational materials to women regarding oral hygiene, and oral health related topics*
- Diet
 - *Nutritious diet is important for a pregnant women*
 - *Intake of the cariogenic substances such as chocolates, sugar candies can cause demineralization of the tooth*
- To reduce caries risk, the patient is advised to
 - *Restrict fermentable carbohydrates and sugars to mealtimes only*
 - *Drink lots of water or milk*
 - *Avoid Carbonated beverages*
 - *Eat fruit rather than drinking fruit juices*

Preventive Strategies Contd.

- Fluoride to reduce plaque levels and promote tooth remineralization
 - *Brushing with tooth paste containing fluoride*
 - *Rinsing with Over the Counter Mouth rinse 0.05 Sodium Flouride once a day or with Mouth rinse containing 0.02 % Sodium Flouride rinse twice a day*
- Professional Dental Care
 - *The safest time to perform dental treatment during pregnancy is in the second trimester*
 - *While second trimester is usually optimal, dental treatment can be accomplished safely at any time during pregnancy*

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Thank You!



Questions?

Lakshmi Mallavarapu, DDS

lakshmiharini@yahoo.com

(701)306-6921