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
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 improvises both mother’s and infants health
Barriers for Oral Care in Pregnancy

- Common categories
  - Structural: Availability of providers, fear of lawsuits 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 $\rightarrow$ more plaque build up $\rightarrow$ 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

- Pyogenic granuloma of gingiva or Pregnancy Tumor
  - Frequently develops in Pregnant women
- Appearance
  - Non-neoplastic, smooth mass whose surface is red to pink based on the vascularity of the lesion
- When:
  - May develop during first trimester but incidence increases through seventh month of pregnancy
- Where:
  - Mostly in anterior gingiva
- Reason
  - Increased level of Estrogen and Progesterone
- Treatment
  - Resolve after the return of hormones to normal levels
  - Some patients do get it excised due to esthetic purposes
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 an 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

Bleeding Gums, Tooth Ache, Cavities, Loose Teeth, Teeth Not Looking Right?

- YES
  - Refer to Dentist
  - Stress the importance of Timely Visit
  - Assist in Accessing Dental Care as Needed

- NO
  - Had a Dental Visit in the Last 6 months

- YES
  - Encourage to Keep next Appointment

- NO
  - Make a Visit ASAP

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*

References

Thank You!

Questions?

Lakshmi Mallavarapu, DDS
lakshmiharini@yahoo.com
(701)306-6921