

Center for Diagnostic Sciences BULLETIN



May 2005

Issue # 11

This bulletin focuses on Dental Care in Pregnant Woman. We thank Dr. Kunwar Vir for his contribution to this issue. As always, we invite your comments, questions, and suggested topics for future bulletins. Please forward your comments to Anisa Marino at anisamar@usc.edu.

she is *planning* a pregnancy, and a treatment plan should be designed with a focus on oral hygiene and preventive dentistry.

Dental Treatment & Management of the Pregnant Patient

Are routine Dental Cleanings (Prophylaxis) safe during Pregnancy?

The pregnant dental patient should be given unique consideration, since the dental practitioner is actually treating two patients: the mother and the fetus. Physiological changes of the body during pregnancy include changes in oral health that are exacerbated by elevated hormone levels (estrogen, progesterone). The old dogma concerning the expecting mother, "one tooth lost for every pregnancy," does not apply. While gingivitis is the most common oral condition observed in pregnant patients, other oral conditions such as pyogenic granuloma, caries, irreversible pulpitis, and dental infections may lead the gravid patient to seek dental treatment. The dental practitioner should keep in mind certain guidelines that apply specifically to the pregnant patient and consult with the attending gynecologist **as necessary** to establish a baseline treatment plan for the common patient.

It is important to note that while dental prophylaxis may be safely performed during any trimester, the *second trimester* is the ideal time for additional routine dental treatment.

What are the General Guidelines for Treating the Pregnant Dental Patient?

What exactly is "routine" dental care for a pregnant dental patient?

It is recommended that the dental practitioner review the medical history of every patient at every appointment, whether male or female. Female dental patients should be asked if they are pregnant, and, if so, the current trimester of the pregnancy should be documented. The gynecologist may be consulted regarding the use of dental radiographs as a diagnostic tool, antibiotics, pain medications, and the use of local anesthetics. **If** the female patient is not pregnant then she may be asked if **and when**

Routine dental care may be considered treatment that should be completed due to emergent caries or infection or dental pathology. This includes, for the large part, dental emergencies from pathology that must be treated by either caries control, restorative dentistry, oral surgery, or endodontic treatment. Routine dental care is *not* elective. For example, cosmetic dentistry, such as dental veneers, or removal of healthy amalgam restorations to be replaced with tooth colored restorations, and teeth whitening that is completed in the dental office or at home, are examples of elective dental treatment. Elective dental care should be postponed until the after the completion of the pregnancy.

What are some of the most common oral conditions associated with pregnancy?

Elevated hormone levels (estrogen & progesterone) are related to an increase in the plaque levels in the pregnant dental patient, leading to swollen and inflamed gums. This "pregnancy gingivitis" affects almost 100% of pregnant women to a certain degree, usually around the 2nd trimester, thus also making it an ideal time for a dental cleaning.

If gingivitis is not treated it can eventually lead to periodontitis, which has been associated with pre term and low birth weight babies.

Another oral condition associated with pregnancy is the manifestation of the pregnancy tumor which is a form of a pyogenic granuloma. This lesion is usually found on the gingiva or papillae between the maxillary anterior teeth and is benign and is a soft, raised, red/purple fluid filled mass that is tender and bleeds easily. The lesion may require excision if it becomes overly symptomatic; however, it usually resolves several months post partum.

The expectant mother may also be at an increased risk for dental caries or “cavities,” because she may be eating smaller and more frequent meals causing plaque levels derived from sugars and carbohydrates to be elevated.

For pregnant patients who have “hyperemesis gravidarum,” meaning excessive morning sickness causing several episodes of vomiting, erosion of the teeth may also be a risk. This effect is usually noticed as a cupping of the lingual surfaces of the anterior teeth.

Are dental radiographs (xrays) safe during pregnancy?

Fetal risk to ionizing exposure is extremely minimal following standard radiographic protocols which include: using a lead apron, high speed film, shielded collimation and filtration. However minimal the risk may be, dental radiographs for the pregnant patient should be minimized and only used to diagnose for emergency treatment. For example, it is appropriate to take one or two dental radiographs to diagnose a dental emergency, and it is not a good idea to take an FMS for a specific dental emergency.

Is local anesthetic safe during pregnancy?

Lidocaine, Mepivacaine, and Prilocaine are considered safe to be used by the FDA. If possible, it would be wise to avoid local anesthetics with vasoconstrictors. Since emergency dental appointments should be kept as brief as possible for the pregnant patient, an anesthetic without vasoconstrictor may provide adequate anesthesia for the duration of the appointment.

Which antibiotics and pain medications are considered safe during pregnancy?

Penicillin, Erythromycin base (not estolate), the cephalosporins, and Clindamycin are considered safe by the FDA to be prescribed to the pregnant dental patient. Tetracycline is absolutely contraindicated for the pregnant patient.

Which pain medications are considered safe during pregnancy?

It is important to remember that the pregnant patient should not have to suffer pain any more than any other person, and pain control and medications are indicated and safe using the following guidelines: Acetaminophen (Tylenol) and Oxycodone are considered safe and Codeine, if prescribed, should only be used in the 2nd and 3rd trimesters, since it has been associated with 1st trimester birth defects. Meperidine (Demerol) should be prescribed for very severe pain.

Are sedatives safe for the pregnant dental patient?

Benzodiazepines such as Valium (Diazepam) are absolutely contraindicated, and Nitrous Oxide should also be avoided.

Which emergency dental procedures are considered safe during pregnancy?

Emergency dental care can include restorations, oral surgery, and endodontics. Oral surgery (extractions) and endodontics (root canal therapy) are considered reasonable for treating dental pathology. However, it must be remembered that short appointments are indicated for the comfort of the pregnant dental patient.

If restorative dentistry is indicated, are amalgam fillings of silver and mercury safe for the pregnant dental patient?

Yes, placing amalgam restorations is considered safe during pregnancy and current research does not indicate otherwise. When placing or removing an amalgam restoration during pregnancy, a rubber dam should be considered standard of care. Amalgam restorations should only be placed or removed

for emergency purposes, not for elective reasons. Glass Ionomers such as Fuji 2LC may be useful for caries control and temporary restorations.

Is the pregnant female considered medical type I or type II?

Although pregnancy is a physiological change and not pathology - a pregnant patient is considered medical type II, because the condition mandates modifications to treatment. After delivery, the patient's medical type would depend on factors unrelated to pregnancy.

Did you know?

**Oral Cancer Awareness Events
March-April 2005
OUTCOMES**

Title of Event	Date of Event	# of Attendees
Oral Cancer Awareness Training Dr. Parish Sedghizadeh	Friday 3/18/05	16
Oral Cancer Awareness Training Dr. David Crowe	Tuesday 3/22/05	25
"Smoking Cessation Protocol for Oral Health Care Providers" Dr. Kimberly Hiroshige	Friday 3/25/05	17
Oral Cancer Awareness Training Dr. Parish Sedghizadeh	Monday 3/28/05	15
Oral Cancer Screening @ UPC-Pharmacy Mrs. Diane Melrose, Dr. Navazesh, Dr. Sobel & DH Students	Friday 4/1/05	60
"Pharmacotherapeutic Aspects of Smoking Cessation" Dr. Alexander Cao	Wednesday 4/27/05	45
Grand TOTAL		178

In this issue, we would like to **thank** the following people for all of their hard work with the preparation of USC, School Of Dentistry's Oral Cancer Awareness Month Activities and Screening at the University Park-Pharmacy on April 1st:

Drs. Parish Sedghizadeh, David Crowe, Mahvash Navazesh, Stephen Sobel, Kimberly Hiroshige-Okumura, Alexander Cao.

Diane Melrose & the following DH Students:

DH 06-Megadi Khodaverdian, Rita Nazarian, Derrick Pham, Veronica Santiago

DH 05-Farnaz Cheshmazar, Amanda Figueroa, Nancy Halstead, Nancy Husted

Our Audio Visual and Facilities Department, Ben Creighton, Vicky Newcomer, Niel Nathason and Carol Parker-Stojakdvich, Wendy Whitfield & Anisa Marino.

Did you know, continued?

Lunch & Learn Seminars	3/18/05	3/22/05	3/28/05	TOTAL
Pre-Test Evaluation	60%	80%	71%	70.33%
Post-Test Evaluation	92%	94%	95%	93.67%

Participating Clinic	# of Attendees 3/18/05	# of Attendees 3/22/05	# of Attendees 3/28/05
AltaMed Health Services	-	1	-
Children's Hospital, LA	1	-	-
Clinica Oscar Romero	8	-	-
Downtown Dental	-	1	-
Eisner Pediatric & Family Medical Center	-	10	2
East Valley Community Health Center	-	1	-
LA County, Dept of Health Services	-	-	2
N/A	1	-	1
Private Practice	3	-	7
Student	-	3	-
UMMA Community Clinic	-	-	1
USC/Union Rescue Mission Dental Clinic	-	1	1
USC, School Of Dentistry	3	8	1

Professional Title	3/18/05	3/22/05	3/28/05
DA	5	4	5
DDS/DMD	8	12	7
MD	-	-	1
N/A	1	-	1
RDA	1	2	-
RDH	-	1	-
DDS/RN	-	1	-
Staff	1	2	1
Student	-	3	-

Did you also, know?

**Number of patients Screened, Accepted, Rejected & Redirected
in the Center for Diagnostic Sciences from March 1, 2005 to April 30, 2005**

