

Stillbirth Tied To Gum Disease In New Study

January 28, 2010

By Nadja Popovich

Pregnant women might want to keep their toothbrush and floss close at hand, according to Dr. Yiping Han, the lead researcher of a new study linking gum disease to stillbirth.

Women may want to consider getting a thorough teeth cleaning before getting pregnant.

While the [connection](#) between oral bacteria and preterm births has been established for over a decade, Han's study provides the first direct human evidence that oral bacteria can also cause stillbirth.

The study, published in the February edition of *Obstetrics & Gynecology*, examined the case of a 35-year-old woman who lost her first baby to stillbirth in her 39th week of pregnancy. An autopsy found the culprit to be *Fusobacterium nucleatum*, a type of bacteria common in human dental plaque.

Han, an associate professor at the [School of Dental Medicine](#) at Case Western Reserve University, was not surprised.

"This isn't the first case of stillbirth caused by *F. nucleatum* that I have encountered -- both before and after this case. I was often referred women who had had stillbirths caused by the bacteria," Han tells Shots, noting that this one was documented because "the patient herself contacted me right after [the birth], so we were able to act quickly enough to collect all the samples to do analysis."

The woman, who had received routine prenatal care and whose pregnancy had been largely uncomplicated, told Han that she had experienced gum bleeding during her pregnancy, which Han notes is consistent with [pregnancy-related gingivitis](#). The mother also reported she had been mildly ill with an upper respiratory tract infection for three days prior to the stillbirth.

Vaginal and rectal samples proved negative for *F. nucleatum*, but an oral sample came up positive. This led Han to the conclusion she had seen coming all along.

"The upper-respiratory infection . . . weakened the immune defense, which would have allowed the bacteria transfer [from the mouth] to the placenta. So the study maybe shows that periodontal disease alone would not have caused the stillbirth without the weakened immunity," she says.

Once the bacteria reached the placenta, it was free to proliferate, because the placenta is an "immune-suppressed" organ, she adds. This means that the immune system is, in effect, trained to ignore the placenta and the fetus so that it doesn't attack and expel the growing baby.

And gum disease is not an idle risk. Half of all pregnant women experience gum bleeding due to gingivitis triggered in part by pregnancy.

"The message we want to send is that if you are contemplating getting pregnant, you need to get good oral healthcare," Han says. "During pregnancy, if you have gum bleeding and come down with another condition like fever or flu, be more careful because this increases the likelihood of the bacteria getting in the bloodstream and translocating to the placenta."

Her advice? Flossing and brushing are essential because good oral hygiene lessens gum inflammation, and therefore lowers the opportunity for bacteria to invade the placenta.

Ideally, women should also get a thorough teeth cleaning before getting pregnant.