Gum disease may cause pregnancy complications

Posted by Yiping Han/Case Western Reserve University September 24, 2008 02:17AM

Categories: Impact, Netwellness

For a very long time now doctors have perceived the placenta as a very good line of defense to protect a human fetus from the elements. But we've known for some time that it isn't an impenetrable barrier.

Tobacco and alcohol, for example, can travel through the mother's system and into the baby's system causing illnesses and birth defects in many cases.

Recently a surprising culprit, a bacterium known as Fusobacterium nucleatum, has been linked to premature births and stillborn infants. This is a surprising finding because F. nucleatum is associated with periodontal (gum) infections rather than genital or uterine infections.

The biggest question on doctors' minds has been - how does this bacteria cause an intrauterine infection when it isn't even found in the vaginal tract?

The answer requires acceptance of a counterintuitive theory - the infection doesn't enter the womb by coming up through the genital tract, rather it makes its way down through the mother's system and into the placenta to trigger a preterm birth.

How the bacteria enters the womb

F. nucleatum - the bacterium that causes the gum infection - is common in the oral cavity but very uncommon in the vaginal tract. Furthermore, the placenta has been perfected by nature to ward off infections and diseases. So how does the bacterium get into the womb? There are four contributing factors:

More bacteria - When periodontal disease is present in the oral cavity, the number of bacteria there can increase by as much as 10,000 times the original population. In other words, unhealthy gums can have disastrous consequences for not just your oral health but for your pregnancy.

How the bacteria harms the fetus

So the mechanism of how the bacteria actually gets into the womb is explained, but...
the question remains - why is it able to do harm when the placenta is designed specifically to protect the fetus?

It appears that F. nucleatum targets the placenta and amniotic fluid in particular when the immune system is working below full capacity. The defense systems of the womb are numerous but not infallible and in some cases the bacterium wins the battle and triggers preterm birth.

How to prevent periodontal disease

The really good thing about this new discovery is that these bacteria enter the blood stream and the womb as a result of a very preventable condition. Periodontal disease can be warded off by simply maintaining good dental hygiene:

• Visit your dentist regularly.
• Brush your teeth at least twice a day (even better: after meals too).
• The rule that almost everyone has trouble following: floss!
• A good anti-gum disease mouthwash is also a good idea.

If you follow all of these steps you will have a much better chance of keeping your gums, and your unborn baby, happy and healthy.

Pregnancy and oral health - what to do

If you are thinking about getting pregnant or are already pregnant and concerned about your oral health, make an appointment for a checkup and cleaning with your dentist just to be sure that you don't have periodontal disease. Your dentist will make the same recommendations for good oral hygiene (regular visits, daily brushing and flossing) that he or she always does.

If you do in fact have periodontal disease the best thing to do is find out and treat it as soon as possible. Follow his or her good advice for oral hygiene to get or stay healthy and protect your teeth, gums, and your pregnancy.

Tags: gum disease, pregnancy