

Oral and General Health - Exploring the Connection

Research Review June 2010

Links between Gum Disease and Bad Pregnancy Outcomes

CONSUMER VERSION

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Over half a million babies are born too early or too small in the United States each year. These children are more likely to die in their first year of life. Those that survive often require more medical care and educational and social support throughout their lives, because they often have reduced mental and physical abilities. This is important to public health because of the toll this condition takes on the individuals, their families and friends, and society as a whole.

Periodontal (gum) disease is one of the most common chronic diseases in humans. Gum disease is an infection caused by bacteria (germs). Chronic gum disease, with bacteria growing deep in the gums around infected teeth, probably affects between one-quarter and one-third of the world's adults. Chronic gum disease can permanently damage the gums and destroy the bone supporting teeth. During pregnancy, 50 to 90 percent of women develop a specific type of gum disease called "pregnancy gingivitis". The bacteria that cause gum disease can spread from the gums into the blood stream. Also, chemicals the body makes in response to the gum disease can spread into the blood stream.

Bad outcomes in pregnancy include diabetes or high blood pressure caused by pregnancy, early birth and low birth weight. The risk factors are many. They include a past history of early birth; use of alcohol, tobacco, and illegal drugs; low educational level; a very young or old mother; lack of care during pregnancy; poor nutrition; being overweight; having diabetes; and having infections.

The bacteria and chemicals the body produces in gum disease that spread into the blood stream can also contribute to the inflammation throughout the body. This inflammation may increase the risk to problems with the pregnancy. Tests can be done for certain markers in the blood for this inflammation. These tests show that the markers are higher with gum disease and lower when gum disease is treated.

Summary

We do not know for sure that gum disease causes bad outcomes in pregnancy, but it does seem to be related in some groups of people. Also, the best clinical trials do not show that treating gum disease lowers the rate of bad outcomes during pregnancy. However, research has shown that routine dental treatment of gum disease helps to lower the level of gum disease in pregnancy. We also know that providing routine dental treatment for gum disease during pregnancy is safe for both the mother and the child.

Conclusion

The evidence is not clear that treating gum disease helps prevent bad outcomes during pregnancy. But we do know certain facts. Infection is a risk factor for bad outcomes in pregnancy. Gum disease is an infection. It is safe to provide treatment to prevent and cure gum disease during pregnancy. So health care providers should make every effort to prevent and treat gum diseases both before and during pregnancy.