

Pregnancy: Bad Oral Hygiene Can Lead To Complications In Pregnancy And Problems For Babies

ScienceDaily (Mar. 31, 2009) — Bacteria from a mother's mouth can be transmitted through the blood and amniotic fluid in the womb to her unborn child. This could contribute to the risk of a premature delivery, a low birth-weight baby, premature onset of contractions, or infection of the newborn child.

This evidence could have an important implication for women and babies' health since simple improvement of dental hygiene may help to reduce the incidence of unknown complications in pregnancy and newborn babies.

In work presented at the Society for General Microbiology meeting in Harrogate today (Tuesday 31 March), Ms Cecilia Gonzales-Marin and colleagues from Queen Mary University of London, described how they had tested the gastric aspirates (stomach contents containing swallowed amniotic fluid) of 57 newborn babies and found 46 different species of bacteria in the samples.

The most prevalent bacteria in the samples may have come from the vagina; however, two of the species were recognized as coming from the mouth and are not normally found elsewhere in the body. These particular bacteria, *Granulicatella elegans* and *Streptococcus sinensis*, are known to be able to enter the bloodstream and have previously been associated with infections remote from the mouth such as infective endocarditis.

"Our studies show that sampling the stomach contents of newborn babies by using gastric aspirates can provide a reliable method of microbial identification. Hospitals routinely take these samples as part of the care of the babies born from a complicated pregnancy and/or at risk of serious infection. They provide a more accessible alternative to amniotic fluid," said Ms Gonzales-Marin, "Our research group is using DNA techniques to confirm if bacteria from the newborn matches the bacteria in the respective mother's mouth".