

Antibiotics Do Little for Inner Ear Infections

MONDAY, Feb. 18 (HealthDay News) -- Antibiotics don't significantly reduce fluid buildup in young children with inner ear infections, a new analysis shows.

Whether such drugs work in this regard has been a matter of conjecture, with one recent study suggesting a benefit in children aged 2 and under. So, Dutch researchers did a meta-analysis of several previously published studies and found the results don't support the use of antibiotics for the fluid buildup that can accompany inner ear infections.

"Due to the marginal effect and the known negative effects of prescribing antibiotics, such as the development of antibiotic resistance and side effects, we do not recommend prescribing antibiotics to prevent middle ear effusion," said lead researcher Maroeska M. Rovers, from the Julius Center for Health Sciences and Primary Care at the University Medical Center Utrecht in The Netherlands.

Ear infections are very common among infants and children. They can lead to fluid buildup in the ear, which is known as otitis media with effusion. This buildup can result in hearing loss, which can affect language development, cognitive development, behavior and quality of life, according to the researchers.

The report was published in the February issue of the *Archives of Otolaryngology-Head & Neck Surgery*.

In the study, Rovers' team collected data on 1,328 children aged 6 months to 12 years with acute middle ear infection. These children had participated in five studies that compared treating ear infections with antibiotics to a placebo or no treatment at all.

Among the children in the studies, 44 percent were younger than 2. Of these children, 51.8 percent had recurrent ear infections. It was in this group of children that the risk of fluid buildup was the greatest.

Rovers' group found that the children taking antibiotics were 90 percent as likely to develop fluid buildup as children who weren't taking the medications. However, this difference was not statistically significant. "No difference in the development of effusion could be detected between the placebo and the antibiotics group," Rovers said.

"More research is, however, needed to identify relevant subgroups of children that have middle ear effusion that might benefit from other treatments," Rovers added.

One expert noted that doctors do not routinely prescribe antibiotics to prevent fluid buildup in ear infections.

"To the best of my knowledge, physicians generally don't prescribe antibiotics for acute otitis media in order to prevent middle-ear effusion; they prescribe them to bring about more prompt resolution of the infection and of its symptoms, especially pain," said Dr. Jack Paradise, a professor of pediatrics and otolaryngology at the University of Pittsburgh School of Medicine and a pediatrician at Children's Hospital of Pittsburgh.

The question of prescribing to prevent middle-ear effusion has become a non-issue over the past decade, Paradise said. "Asymptomatic middle-ear effusion is extraordinarily common and has been shown to be essentially harmless under ordinary circumstances," he said.