Antibiotics linked to asthma, allergies in babies

For years, M.D.s have been warned not to indiscriminately give antibiotics to patients, especially children. Many refuse to heed the warnings and the result has been the creation of "super-bacteria" which are resistant to antibiotics, and a deterioration of human immune systems. Now, a study conducted at Henry Ford Hospital in Detroit adds more bad news: Children who receive antibiotics within the first six months of life increase their risk of developing by age seven allergies to pets, ragweed, grass and dust mites and asthma.

The problem is a serious one, since nearly half of all children receive antibiotics before they reach their seventh birthday – making them two-and-a-half times as likely to have asthma, and one-and-a-half times as likely to have allergies.

Researchers also found that if a child is breast-feeding, the mother's history of allergies adds to the risks of allergy for a child taking antibiotics.

The study's findings are believed to be the first of its kind in the United States to find a link between antibiotics and allergies and asthma in children.

Christine Cole Johnson, Ph.D., the study's lead author and senior research epidemiologist for Henry Ford's Department of Biostatistics & Research Epidemiology, presented the study at the European Respiratory Society's annual conference in Vienna.

Although she stopped short of suggesting that children not be given the drug, she noted that "I believe we need to be more prudent in prescribing them for children at such an early age. In the past, many of them were prescribed unnecessarily, especially for viral infections like colds and the flu when they would have no effect anyway."

Dr. Johnson theorizes that use of antibiotics may affect the gastrointestinal tract and alter the development of a child's immune system.

The increasing use of antibiotics in children from 1977 to the early 1990s led to what federal health officials called a public health crisis in antibiotic resistance. A national campaign commissioned by the U.S. Centers for Disease Control and Prevention has sought to promote a more judicious approach for prescribing antibiotics for children.

For the Henry Ford study, researchers followed 448 children from birth to seven years. The children were evenly divided by gender.

Data was collected before the birth and at the first four birthdays until the children were six and seven years old, when they underwent a clinical evaluation by a board-certified allergist. The data included information about all prescribed oral antibiotics; blood tests that measure the antibody (immunoglobulin E) that causes allergies; and skin reaction tests that show whether a person is hypersensitive to an allergen. Researchers also collected data on all clinical visits and made home visits to collect environmental samples.

Of the 448 children, 49% had received antibiotics in the first six months of life. The most common antibiotic category prescribed was penicillin.

Among the findings…

By age seven, children given *at least* one antibiotic in the first six months were 1.5 times more likely to develop allergies and 2.5 times more likely to develop asthma than those who did not receive antibiotics.

Those who lived with fewer than two pets, were 1.7 times more likely to develop allergies, and three times more likely to develop asthma.

And those whose mother had a history of allergies, were nearly twice as likely to develop allergies.

SOURCE: Media Advisory, Henry Ford Health System, Sept. 30, 2003.