

Omalizumab Aids Asthmatics With Allergies to Cats

SAN FRANCISCO — Omalizumab, when added to asthma treatments, reduced the number of rescue bursts of corticosteroids in patients allergic to cat dander, Marc Massanari, Pharm.D., said in a poster presentation at the International Conference of the American Thoracic Society.

The omalizumab patients needed 25% fewer steroid puffs than those on placebo and had a 100% increase in forced expiratory volume in 1 second (FEV₁), compared with a 33% increase in placebo patients, both statistically significant differences.

The results came from a pooled population of 2,236 patients enrolled in five placebo-controlled clinical trials of omalizumab. Dr. Massanari and his colleagues, all of whom are employed by Novartis Pharmaceuticals Corp., East Hanover, N.J., focused on the 1,589 patients with moderate to severe and persistent IgE-mediated asthma and who showed sensitivity to cat dander. Of those, 811 received omalizumab and 778 received placebo administered subcutaneously every 2 or 4 weeks.

The omalizumab patients also had significant decreases in rescue beta-agonist puffs and showed significant improvements in all domains of the Asthma Quality of Life Questionnaire. Novartis and Genentech Inc. supported the study

—Robert Finn

Lean Smokers Face A Greater Risk Of Lung Cancer

LOS ANGELES — High body mass index is associated with a lower risk of lung cancer among smokers, Jian-Min Yuan, Ph.D., reported in a poster presentation at the annual meeting of the American Association for Cancer Research.

The study involved a prospective, population-based cohort of 63,257 middle-aged and older Chinese men and women who were enrolled in the Singapore Chinese Health Study between 1993 and 1998.

Smokers with a body mass index (BMI) of at least 28 kg/m² had a 35% lower risk of developing lung cancer than those with a BMI below 20, wrote Dr. Yuan of the University of Minnesota, Minneapolis. The results were adjusted for potential confounders, including age at enrollment, sex, number of cigarettes smoked daily, number of years smoking or number of years since quitting smoking, and dietary intake of beta-cryptoxanthin and isothiocyanates.

The inverse association between BMI and lung cancer risk was strongest in current smokers, much weaker in lifelong non-smokers, and absent in former smokers. The association was stronger in men than in women. The investigators hypothesized that smoking may increase the metabolic rate that leads to high cellular production of reactive oxygen species in lean smokers.

—Robert Finn

A Range of Problems Can Mimic Croup

BY GREG MUIRHEAD
Contributing Writer

MAUI, HAWAII — All that appears to be croup is not, said Dr. Seth M. Pransky.

The conditions mimicking croup range from anatomical problems to gastroesophageal reflux disease (GERD) to an infection contracted at birth, said Dr. Pransky, director of pediatric otolaryngology at Rady Children's Hospital, San Diego. They include the following:

► **Subglottic hemangioma.** These patients "present with 'croup' at about 6 weeks of age, but they have no fever, they have a good cry, and up until that point they've been eating pretty well," he said at a meeting sponsored by the University Children's Medical Group and the American Academy of Pediatrics. "But they come in with some respiratory difficulty."

These patients have a submucosal mass, located beneath the vocal cords, most likely in the left posterolateral wall, he explained. Females are more likely to have it than are males, by a ratio of 3.5:1.

Management options include the use of steroids, GERD therapy, and—in life-threatening cases only—vincristine, he said. Surgery is usually necessary and often is done endoscopically. Open surgical excision also can be performed. Rarely, tracheostomy is necessary.

► **Postintubation glottic and subglottic lesions.** These may be caused by either long or quick intubations, he said at the meeting, which was also sponsored by California Chapter 2 of the AAP.

In the subglottis, mucous glands abraded by intubation become obstructed and secrete heavily, creating a thick-walled cyst, especially when the patient has a cold; this causes airway obstruction.

"These patients present with stridor, typically when they have a cold," he said. The situation usually resolves with the

abatement of the cold. A history will reveal the prior intubation that caused the situation, and there are surgical options for treatment.

► **Congenital airway abnormalities.** These include glottic webs, which tend to be thick and to extend to the subglottis. They include the 22q deletion syndrome, which is associated with a variety of abnormalities, including speech abnormalities. It's a form of laryngeal atresia, an abnormality in the pharynx. There are surgical options for treatment.

► **Laryngeal clefts.** These are associated with recurrent cough and aspiration problems, he explained. "Clefts [classified as Veau I or II] can be treated endoscopically. Clefts [classified as Veau III] go into the trachea itself and require open surgical intervention."

► **Recurrent respiratory papillomatosis (RRP).** The patient may have a history of "asthma" or recurrent croup, but the correct diagnosis is usually identified at about age 3 years, although this infection has been found in neonates. Ask about maternal vaginal condylomata, Dr. Pransky recommended. In preadolescent patients, especially girls, think about the possibility of sexual abuse, because this disease is caused by the human papillomavirus (HPV). If the child was infected by the mother during delivery, keep in mind that the infection may clear from women within 2 years, and therefore may be absent from the mother by the time the physician finds the infection in the child.

The goals of treatment are to maintain the airway and voice and to prevent the disease from spreading to the lungs, where it can convert to a malignancy. Tracheostomy is avoided because the site of incision is where the virus is likely to go.

A drug that may be helpful in patients with RRP from HPV infection is cidofovir, which is approved for treatment of

cytomegalovirus retinitis in HIV patients. Several studies have found "lasting remission in pediatric patients about 50% of the time," he said. "Lasting remission is 5 years without disease," he added.

But the most important measure to take in preventing RRP is vaccination for HPV, he emphasized.

► **Gastroesophageal reflux disease (GERD).** The occurrence of nocturnal cough is the most important piece of clinical information suggesting GERD. Ear-nose-throat manifestations of and associations with GERD include rhinitis of infancy, recurrent otitis, chronic sinusitis, stridor, hoarseness, chronic cough (especially nocturnal), halitosis, laryngospasm/apnea, severe laryngomalacia, recurrent croup, subglottic stenosis, recurrent bronchitis, and asthma.

► **Eosinophilic esophagitis (EE).** The symptoms of this disorder are similar to GERD but often do not respond to GERD therapy. Adolescents who do not have a history of a tracheoesophageal fistula but who gag on food or have swallowing problems may have EE, he said, "unless proven otherwise."

"It's very hard to treat; right now, the only treatment is swallowed steroids," he noted. He predicted that there would be a patented product available for EE treatment within a year.

► **Foreign body.** A history may reveal this problem, along with x-rays and the presence of a transient wheeze. The use of a double-headed stethoscope allows the physician to listen to both sides of the lungs at the same time and to check for subtle differences suggestive of a foreign body. "The critical issue for tracheal or airway foreign bodies is history, history, history," said Dr. Pransky who disclosed that he is on the speakers' bureau for Merck & Co.; he also conducts research with ArthroCare Corp. and Medtronic Inc. ■

Asthma Severity Tied to Home Improvements

BY KATE JOHNSON
Montreal Bureau

TORONTO — Asthma symptoms improve in children whose homes are remodeled to reduce triggers such as dust mites, mold, mice, and cockroaches, Dr. Megan Sandel reported in a poster presentation at the annual meeting of the Pediatric Academic Societies.

Families were randomly assigned to receive education plus an intervention (remodeling) or education only with the intervention delayed for 4 months. The data were collected before the second group received the intervention, explained Dr. Sandel of Boston University.

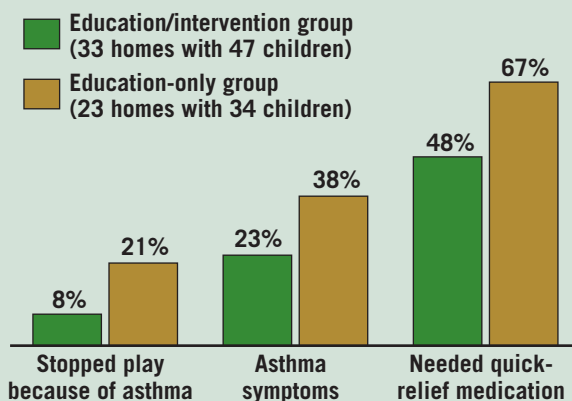
Among the 56 families with complete data representing 81 children with asthma, home remodeling resulted in better asthma outcomes, compared with education only. In total, 78% of homes required integrated pest control for mice and cockroaches, 40% required carpet removal to control dust mites, 36% required a bathroom fan to control mold,

12% required a high-efficiency particulate air filter, 10% required a kitchen fan, and 15% required a window fan.

Compared with homes in the education-only group, intervention homes showed lower mouse infestation scores (0.7 vs. 1.4). Similarly, bathroom mold improved from 17% to 8% after the intervention, compared with worsening in homes with education only (15% to 49%).

Over a 2-week period, the intervention group also had fewer asthma symptoms (23% vs. 38%) and fewer periods of stopped play because of asthma (8% vs. 21%), compared with the education-only group. The need for quick-relief medica-

Fewer Asthma Symptoms in Intervention Group



Note: Based on data over a 2-week period.
Source: Dr. Sandel

tion over 2 weeks also was less in the intervention group, compared with the education-alone group (48% vs. 67%); this represented a reduction of 10% in the intervention group, compared with an 11% increase in the education group. ■