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Congratulations!

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Look for additional information on our website: www.coloradoallergy.com

Support Groups | Current Drug Studies | News Articles | Providers | New Patient Forms | Research Studies | Flu Information | Allergy Injections | Appointment Info | Patient Education | Pollen Counts



125 Rampart Way, Suite 200 Denver, Colorado 80230

Founders Award Scholarships

In honor of the Founding Fathers of CAAC: David Pearlman, M.D., Sanford Avner, M.D., Jerome Buckley, M.D., and John Selner, M.D., our physicians proudly award four \$1000 scholarships each year to our patients. Eligibility requirements are: graduating high school seniors, college undergraduate or graduate students in good academic standing and have been accepted or are currently enrolled in an accredited U.S. college. Applicants must be a current patient of CAAC for a minimum of one vear and a citizen of the United States. Applications and criteria can be found on our website at: coloradoallergy.com/about-us/scholarship/

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BREATHE BETTER LIVE BETTER

The Penicillin Allergy Problem

By Erin Kempe, DO



Of all medication allergies, penicillin is the one most commonly reported by patients. Up to 10% of patients report a history of reaction

to penicillin. This is a significant problem, as the issues of drug-resistant bacterial infections and the high cost of healthcare become more prevalent. When a patient has a suspected penicillin allergy, in order to avoid a potential allergic reaction, alternative medications are prescribed to help fight the bacterial infections that might otherwise be controlled with penicillin or a related antibiotic. This can contribute to multiple-drug resistant organisms, which has created a public health issue. This also contributes to the high cost of healthcare, as alternative antibiotics are often significantly more expensive than penicillin or related medications.

Almost every medication carries a risk of side effects. For many antibiotics, these can include headache, fatigue, nausea, and diarrhea, among others. If the medication is needed for an infection, these unpleasant symptoms do not place the patient at risk of severe allergic reaction. Symptoms of allergy to penicillin include hives and itching; swelling of the lips, tongue, or airway; wheezing or difficulty breathing; vomiting; a sudden decrease in blood pressure; and can be life-threatening. It is important to distinguish between side effects and symptoms of true allergy to penicillin. However, for many patients, the reported reaction to penicillin occurred

RELIABLE TESTING IS KEY Fortunately, there is a reliable test to determine whether a patient has a true penicillin allergy. It is key for patients who think they are allergic to penicillin to be evaluated for true allergy. Several different portions of the penicillin molecule that are known to trigger allergic reactions in susceptible individuals are assessed with skin prick testing. If this testing is negative, a second step of intradermal testing (a small amount of extract is injected underneath the skin) to these same antigens is performed. If skin prick testing and intradermal testing are negative, this rules out penicillin allergy with nearly 100% certainty. Blood testing for penicillin allergy is not reliable, and not useful in ruling out true penicillin allergy.

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2018/2019 ANNUAL NEWSLETTER

in childhood, and may be difficult to recall. Many patients do not even remember having a reaction, and were simply told by family members to avoid penicillin.

FAMILY HISTORY

Many patients avoid penicillin due to a family history of the allergy. There is no evidence that penicillin allergy is specifically inherited. If they have never personally had a reaction to it in the past, patients with a family history of the allergy do not need to avoid penicillin. Even for patients with a known history of allergy or anaphylaxis to penicillin and related antibiotics, 50% will develop tolerance over a 5-year period, 80% over a 10-year period, and up to 90% over a 20-year period. Once a patient has been tested and has tolerated a course of oral penicillin, their risk of re-developing penicillin allergy is very low. Removal of penicillin from a patient's allergy list can significantly improve available options for addressing infections and can simplify treatment plans for many patients.

If you have a history of penicillin allergy or have been told you should avoid this class of medications, we encourage you to talk with your allergist to determine if penicillin testing is appropriate for you.

Did you know that **Colorado Allergy** & Asthma Centers houses our own research division?



There are a number of reasons our patients elect to participate in clinical trials. Oftentimes they have asthma, COPD or allergies and are interested in finding a cure or better treatment of these conditions. Sometimes, they are healthy and want to improve treatment for a certain disease. The following are additional ways patients find value when participating in clinical research:

- * Opportunity to contribute to the development of medical treatments
- * Further understanding of their disease process
- ✤ Drugs under study are at no charge
- * Additional medications may be provided at no cost
- * Monetary compensation for time and travel
- * Free medical tests and examinations e.g. / chest x-ray / laboratory tests/skin testing etc.

Interested? Contact CAAC Research today!

(720) 858-7510 http://coloradoallergy.com/research/allergy-asthma-research/

CAAC Gives Back!

For the 2nd year in a row, 2018 will be a year of giving back for Colorado Allergy & Asthma Centers.

The Board of Director's developed a Community Outreach Fund and will be distributing \$12,000 throughout our 12 clinics in an effort to give back to each of their respective twelve communities. Each clinic is allotted funds to serve to a particular organization of need within their community and is also encouraged to serve of their time as well. The CAAC Board of Directors feels that by providing these modest grant awards to our area non-profits, we can increase our local impact.

The programs that were served in 2017 include:

- The Samaritan House
- Denver's Homeless
- CEC Early College



Rocky Mountain Diaper Depot Adam's Camp

- Colorado Youth for a Change
- Ronald McDonald House—Denver
- Gardens on Spring Creek
- Weld Country Food Bank
- Fresh Harvest Food Bank
- Douglas / Elbert County Task Force
- Parker Task Force
- Stepping Stone Support Center
- Project KARE
- Max Fund
- Hope House of Colorado
- · Boys & Girls club of Metro Denver
- Colorado Coalition for the Homeless

Welcome Dr. Kara Crosby!

We are thrilled to announce that we have added another physician to our roster. Kara Crosby, DO joined CAAC in April of 2018 and has begun practicing at our Highlands Ranch location.

Dr. Crosby is passionate about providing high quality care to her patients. She believes in evidence based medicine with a patient centered approach. She employs thoughtful listening and communication to thoroughly understand the needs of the individual patient.

"Dr. Crosby comes to us with a wealth of experience in the private practice arena and a very distinguished academic resume. She is board-certified in pediatric and adult allergy/immunology, and is excited to share with our patients the latest treatments for the allergic diseases they face. With the population and

growth explosion of Denver and its surrounding areas, CAAC has strived to keep pace by adding convenient locations staffed by impeccably trained board-certified allergists. In the last three years we have added five new physicians to the practice, which we feel sets the table for another 45 years of serving the community."

says Mark Ebadi, M.D., President of Colorado Allergy & Asthma Centers.

Dr. Crosby received her bachelor's degree in biology from Ohio University and completed her medical school education at Lake Erie College of Osteopathic Medicine. She trained in pediatrics at Akron Children's Hospital and in allergy and immunology at the University at Buffalo.

Dr. Crosby lives in Denver with her husband and son. She enjoys hiking, biking, reading, and traveling.

Did you know that early introduction of peanut has been shown to decrease the risk of peanut allergy? By Kara Crosby, DO

The Learning Early About Peanut (LEAP) study, published in The New England Journal of Medicine in 2015, showed that early consumption of peanuts in high risk infants dramatically decreases the risk of developing peanut allergy.

Infants from 4 to 11 months old with severe eczema, egg allergy, or both were randomized into two groups. One group was regularly fed peanuts and the other group completely avoided peanuts, until the age of 5. Additionally, they stratified patients into two groups at study entry, children with sensitivity to peanut extract and those without sensitivity (as determined by skin prick tests).

Upon completion of the study, they found that regular consumption of peanuts was associated with a 70% reduction in peanut allergy in those previously sensitized and a 86% reduction in those showing no prior sensitivity.

These were fantastic results but the question remained would this reduction last? The Leap-On study, published in 2016, was done to provide these answers.

The majority of children involved in the LEAP study continued with the Leap-On study. Following completion of the initial study, all the participants were instructed to completely avoid peanuts for 12 months. At 6 years old only 4.8% of the original peanut consumers were found to be allergic, compared to 18.6% of the original peanut avoiders. After a year of avoidance, there was no significant increase in peanut allergy prevalence

However, higher risk infants including among the early peanut consumers. those with eczema, food allergy, or This indicates a sustained tolerance a sibling with food allergy should not to peanuts. have peanut introduced until seeing an allergist. Although, peanut introduction can still be beneficial in How do we apply these higher risk children, in those individuals studies to everyday life? it is important for us to skin test and/ or perform oral food challenges to ensure the safe introduction of peanut. Hopefully, together we can get peanut introduced into more children's diets early on and help prevent peanut allergy!



In infants with no risk factors, early introduction of peanut between 4-11 months can be done safely at home. After introduction, keep peanut protein in the diet regularly, in the study infants were fed 6 grams peanut protein per week until the age of 5.

