National Jewish Health®

A newsletter for health care providers

CONNECTIONS

Spring 2014

Team Approach to Food Allergies Helps Patients and Families

According to the National Institute of Allergy and Infectious Diseases (NIAID), recent studies have found almost one in 20 children under the age of five are allergic to at least one food. The Pediatric Food Allergy Diagnosis and Management Program at National Jewish Health continues to provide internationally-recognized leadership in food allergies, bringing together a team of highly skilled physicians, nurses, dietitians and psychosocial clinicians to help kids and families with food allergies. The program was pioneered by National Jewish Health physicians more than five decades ago.

Patients benefit from a comprehensive team approach designed to provide accurate diagnosis, individualized treatment and in-depth education to address the specific needs and goals of each patient.

Once a thorough history and physical examination are completed, evaluation and services for patients may include:

- Allergen skin testing
- Laboratory blood testing
- Nutritional evaluation and dietary consultation, including safe elimination diets
- Food challenges
- Evaluation for other allergic conditions, including eczema (atopic dermatitis), allergic rhinitis and asthma
- Development and maintenance of a treatment plan
- Patient education and support
- Psychosocial interface to assess the best ways to achieve compliance and deal with difficulties due to food allergies
- Follow-up visits to address the changing needs of the patient
- Development of a partnership, including the patient and family, with the primary care provider and the Food Allergy Diagnosis and Management team
- Eosinophilic esophagitis may be identified and another management approach introduced

Patients with food allergies often suffer from other allergic diseases and immune system disorders. In addition to expertise in the treatment of food allergies, the National Jewish Health Pediatrics team is renowned for the management and treatment of other allergic disorders and immune problems often experienced by food-allergic patients.

Food Challenges Aid in the Diagnosis of Food Allergies

Food challenges often are done to help identify an allergy to a specific food and the amount of food it may take to cause a reaction. This is a key diagnostic tool in the Pediatric Food Allergy Diagnosis and Management Program at National Jewish Health. Our Food Challenge unit was the first dedicated program of its kind in Colorado with the necessary medications, equipment and staff experienced in the treatment of allergic reactions. Primary reasons for doing a food challenge include:

1. Determine whether the wrong food is suspected as the cause of symptoms.
2. Prove that a food is NOT the cause of symptoms.
3. Verify whether a patient has outgrown food allergies.
4. Discover the degree of sensitivity.

Refer a patient with suspected food allergies:
Physician Line 800.652.9555
or njhealth.org/professionals

National Jewish Health®
Science Transforming Life®

Dedicated Lupus Program Offers Special Expertise for a Complex Disease

Systemic lupus erythematosus, referred to as SLE or lupus, is a chronic and often complex autoimmune disease that can affect almost any organ in the body. This disease is commonly seen in women of childbearing age but also can be seen in men. Most patients present with rash, joint inflammation and significant fatigue, but each patient can express the disease differently. Manifestations can be mild, with symptoms such as arthritis, or severe, with widespread organ dysfunction such as renal failure.

Lupus is called "the great imitator" due to its wide range of symptoms, which often are confused with other health problems. For this reason, patients with symptoms of lupus should see a rheumatologist for further evaluation.

JoAnn Zell, MD

JoAnn Zell, MD, is a rheumatologist at National Jewish Health with a special interest in lupus. She offers expertise in complex lupus care — particularly pregnancy and nephritis — and has been involved in lupus clinical care and research for over a decade.

Refer your patients with known or suspected lupus to the Lupus Program at National Jewish Health to ensure they receive the best care for this complex condition. With seven clinicians, our full-service rheumatology department is one of the largest rheumatology practices in Denver.

Refer a patient:
Physician Line 800.652.9555 or njhealth.org/professionals

To speak with Dr. JoAnn Zell about a current or potential lupus patient, email her directly at **zellj@njhealth.org.**

Gastroenterology Services at National Jewish Health

National Jewish Health offers a comprehensive gastroenterology and hepatology program to treat a range of gastrointestinal (GI) and liver diseases, from screening colonoscopies and hepatitis C to GI malignancies. Gastrointestinal disorders frequently are observed in patients with respiratory diseases and vice versa. Our physicians are board certified in both internal medicine and gastroenterology and offer your patients special expertise in pulmonary-related GI conditions.

Screening Colonoscopies

According to the American Cancer Society (ACS), colorectal cancer is the third most common cancer diagnosed in both men and women in the U.S. The ACS estimates in 2014, 96,830 new cases of colon cancer and 40,000 new cases of rectal cancer will be diagnosed. Colon cancer screening is recommended by the U.S. Preventive Services Task Force (USPSTF) using colonoscopy, sigmoidoscopy or high-sensitivity fecal occult blood testing starting at age 50 and continuing until age 75. People at higher risk of developing colorectal cancer should begin screening at a younger age and may need to be tested more frequently.

National Jewish Health offers colonoscopies for colon cancer screening and accepts most insurance. Appointments are available without physician consultation when appropriate. We offer high-quality exams with average adenoma detection rates of 45 percent (national average is 15–25).

Refer a patient for screening colonoscopy:
Physician Line 800.652.9555 or njhealth.org/professionals

Schedule a screening colonoscopy:
Scheduling 800.621.0505 or Minimally Invasive Diagnostic Center 303.270.2420

Adult Clinical Interests

Pulmonary Hypertension: Early Diagnosis and Treatment Are Critical

Pulmonary hypertension (PH) can be difficult to diagnose due to non-specific symptoms and presentations. PH often coexists with conditions such as lung disease, autoimmune disease or obstructive sleep apnea. Patients may go undiagnosed for long periods of time, leading to a delay in starting treatment. Dr. Brett Fenster, director of the Pulmonary Hypertension Program at National Jewish Health states, "Early identification and treatment of PH is recommended, because advanced PH may be less responsive to therapy. Patients whose PH is diagnosed early often experience higher quality of life over the course of their treatment."

National Jewish Health is uniquely positioned to diagnose and treat PH patients:

- Faculty expertise in both respiratory and cardiology medicine
- Comprehensive pulmonary evaluations for the whole heart
- One of the world's largest state-of-the-art pulmonary physiology laboratories, and the most current technology and techniques in our Cardiac Catheterization Laboratory

Indications for referral directly to our team of cardiologists:

- Unexplained dyspnea, chest pain, palpitations or edema
- Obstructive sleep apnea with unexplained dyspnea
- Echocardiogram indicates suspicion for pulmonary hypertension

Patients at risk for PH include those with:

- Autoimmune diseases: scleroderma, lupus
- Dyspnea with other comorbid conditions (connective tissue disease, lung disease, heart disease, obstructive sleep apnea)
- Heart disease: diastolic dysfunction, valvular heart disease, shunts, congenital heart disease
- Chronic hypoxia or lung disease: COPD (emphysema, chronic bronchitis, alpha-1 antitrypsin deficiency), asthma, interstitial lung disease
- Drug use: methamphetamines, diet drugs, cocaine
- Sickle-cell anemia
- Liver disease
- Chronic pulmonary embolism

Consortium of Food Allergy Research

National Jewish Health is one of the leading institutions that comprise the national Consortium of Food Allergy Research, or CoFAR. CoFAR fosters new approaches to prevent and treat food allergies and recently was expanded in scope to include research on the genetic causes underlying food allergy, and food immunotherapy to establish desensitization and tolerance to foods. Mechanistic studies of food allergy-associated eosinophilic gastrointestinal diseases (EGIDs) also are being pursued.

Continued funding for CoFAR is provided by the National Institute of Allergy and Infectious Diseases (NIAID) part of the National Institutes of Health (NIH). NIAID established CoFAR in 2005 with five clinical sites, including National Jewish Health, with the goal of helping to improve understanding of why food allergies develop and how they can be treated or prevented.

Initial trials studied whether sublingual immunotherapy, during which drops containing gradually increasing amounts of peanut protein are given under the tongue, or suppositories with increasing amounts of peanut protein were effective in treating peanut allergic people. An ongoing observational study, which enrolled over 500 infants with known egg or milk allergy, aims to determine what factors correlate with an allergy continuing or resolving, and with developing a new allergy to peanuts. As part of the program expansion, two CoFAR sites will look for genes associated with food allergy, and three sites will conduct studies to understand eosinophilic esophagitis.

The CoFAR site at National Jewish Health is currently enrolling subjects for two studies. The first study is recruiting children with egg allergy, age 3 to 16 years, to determine their tolerance of baked egg protein, followed by a desensitization approach in children who failed a baked egg challenge. Introduction of baked or denatured egg protein in egg allergic children is expected to accelerate tolerance to egg protein in general. The second study is enrolling subjects with peanut allergy, age 4 to 24 years, to attempt desensitization to peanut protein through the skin, using a patch. In preliminary studies, this approach was considered safe with the potential benefit of improving the oral tolerance of peanut protein.

Indications for In-Lab Polysomnography Versus Home Sleep Testing

Home sleep tests are popular with patients but not clinically indicated for everyone. The Sleep Center at National Jewish Health has created a clinical indication chart for use in your practice.

CLINICAL INDICATIONS FOR IN-LAB PSG VERSUS HST

	In-Lab Polysomnography	Home Sleep Test
Indications	Any patient at high risk and/or with suspicion of sleep apnea or other sleep-related breathing disorder. High risk: • BMI >35 • Congestive heart failure • Atrial fibrillation • Treatment for refractory hypertension • Type 2 diabetes • Nocturnal dysrhythmias • Stroke • Pulmonary hypertension • High-risk driving population • Pre-operative for bariatric surgery • Comorbid medical disorders	Patients with moderate to high probability for obstructive sleep apnea; can be concurrent with comprehensive sleep evaluation. Moderate to high-risk patients who do **NOT** have: • Medical comorbidities • Severe pulmonary disease • Neuromuscular disease • Other sleep disorders • Narcotics use history • History of seizures • BMI >45
Contraindications	None	• Cardiac comorbidities • Severe pulmonary disease (COPD, asthma) • Neuromuscular disease • Other sleep disorders: central sleep apnea, narcolepsy, insomnia, parasomnias, periodic limb movement disorder • Use of narcotics • History of seizures • Morbid obesity (BMI >45) • Patients who lack the mobility or dexterity to use the testing equipment
Testing Parameters	• 21 channels of data • Sp02, airflow, respiratory effort, EKG, EEG, EMG (leg and chin), nasal pressure, snore sensor, body position	• 3 to 7 channels of data • Sp02, airflow, respiratory effort, EKG (not all HST units measure EKG)

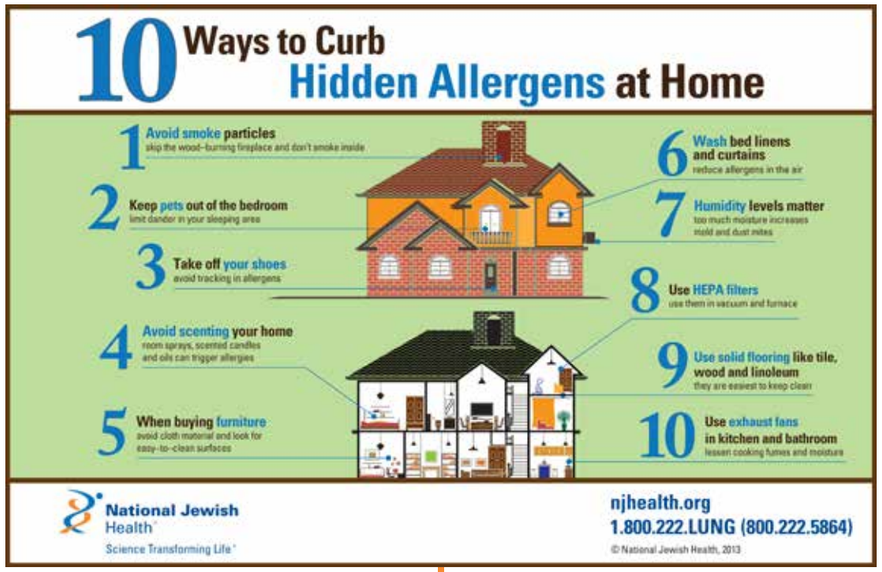
Advantages	• Gold Standard diagnostic test
	• Technicians adjust sensors during test for best accuracy
	• If CPAP already started:
	  • Monitor for CPAP-induced central apneas
	  • Monitor for persistent hypoxia
	  • Sleep Tech can help fit mask
		• Comfort and convenience of home
		• Fewer lead wires
		• Less expensive

Disadvantages	• Patients must come to lab for testing • More expensive, but covered by most insurances	• Lower degree of accuracy • Devices not standardized; have varying results • Cannot detect sleep disorders other than OSA and CSA • Yields both false negative and false positive results (lead wires can fall off; false results for mild sleep apnea) • No clear responsibility for scoring/reporting • Use of AutoPAP for titration can induce CSA

If you would like an electronic copy of this chart, please email us at **kliner@njhealth.org**

Helpful Practice Tools for Patient Education

The For Professionals section of the National Jewish Health website includes a Practice Tools section with infographics you can print, post and use for discussions with your patients. From information on flu vaccines to asthma to food and other allergies, the infographics condense a large amount of technical and scientific information into a one-page, easy-to-understand format. Here's a sample of an infographic on hidden allergens at home, which patients have found useful during spring allergy season.



You can download and print this infographic and others at **njhealth.org/infographics**

Meet Our New Clinicians

Kendra Hammond, MD,
Adult Pulmonary

Luciano Lemos-Filho, MD, MMSc,
Pulmonary at National Jewish Health South Denver

James O'Brien, MD,
Pulmonary

Robert Lapidus, MD,
Pulmonary, Sleep Medicine

Jason McCarl, MD,
Critical Care and Pulmonary

Jennifer Fish, NP,
Pediatrics

Marcia Middel, PhD,
Adult Psychology

South Denver Clinic Offers Pulmonary Function Testing and More

The National Jewish Health South Denver clinic is staffed by 10 physicians and provides pulmonary, sleep and critical care medicine services for adults in the south Denver area. The clinic is conveniently located near the corner of East Hampden Avenue and South Logan. National Jewish Health South Denver provides comprehensive evaluations for all pulmonary conditions, including on-site pulmonary function testing. Pulmonary function tests performed in the clinic include:

- Pre/post bronchodilator
- Spirometry
- Lung volumes
- Airway resistance
- Diffusion
- 6-minute-walk oxygen tests

Patients referred for pulmonary function tests do not need to be established patients; tests may be done independently of an office consultation. Patients will be scheduled quickly, and a copy of our physician's interpretation of the pulmonary function test will be sent to you within one working day.

Schedule a pulmonary function test:
303.788.8500 ext. 7511

Schedule of Upcoming CME and CE Activities

Presented by the Office of Professional Education at National Jewish Health

njhealth.org/proed or call 800.844.2305.

ONLINE COURSES

National Jewish Health offers a variety of online courses. There is no fee to take the online courses. For a complete listing, including CME credit approvals, visit njhealth.org/cme. Here is a small sampling of some of the online courses available now:

Asthma
Assessing Asthma Control to Improve Patient Outcomes
Expires 9/4/2014

Chronic Obstructive Pulmonary Disease
Enhancing the Management of COPD: Best Practices for the Primary Care Physician *Expires 12/10/2014*

Idiopathic Pulmonary Fibrosis (IPF)
Idiopathic Pulmonary Fibrosis: Improving on the Standard of Care and Looking Ahead to New Therapeutic Options *Expires 12/18/2014*

Rheumatoid Arthritis (RA)
Knowledge and Outcomes in Rheumatoid Arthritis and Its Cardiovascular Manifestations: Closing the Gap *Expires 5/2/2014*

nj4kids®

Spirometry Essential in Diagnosing Childhood Asthma

National guidelines consider spirometry testing to be a key clinical activity for the diagnosis and management of patients with asthma, yet its use by pediatricians often is limited. A 2010 survey by *Pediatrics*® found only 52 percent of physicians who cared for children with asthma used spirometry in clinical practice.

The National Asthma Education and Prevention Program (NAEPP) Expert Panel Report (EPR-3) on Asthma Diagnosis and Treatment Guidelines emphasize that establishing an accurate diagnosis is essential in the treatment of asthma. Diagnosis of asthma is established through the use of medical history, physical examination and spirometry. According to the NAEPP, indicators for diagnosis of asthma also include:

- Wheezing
- Cough
- Chest tightness
- Dyspnea
- Worsening of symptoms in the presence of environmental stimuli
- Worsening of symptoms at night

Dr. Bruce Bender, professor of pediatrics, head of the Division of Pediatric Behavioral Health at National Jewish Health and co-director of the Center for Health Promotion, has trained approximately 120 primary care practices, mostly in rural Colorado, via the Asthma Toolkit Program. Emphasis is placed on the use of spirometry. Dr. Bender notes, "Spirometry is a critical diagnostic tool that's often overlooked in the primary care setting."

Why Perform Spirometry

- Spirometry identifies airway obstruction, often before symptoms are present, and can help predict exacerbations
- The degree of obstruction is hard to assess by history and physical alone
- Spirometry is the only way to truly know your patient's lung function and medication effectiveness
- Spirometry is a National Institutes of Health recommended assessment of asthma

When to Order Spirometry — All Patients With Asthma

- Initial assessment to establish a baseline
- After treatment is initiated and stabilized to document normal or near normal lung function
- At least every 1–2 years to detect decline in lung function
- NOT during exacerbations

When and Why to Refer to National Jewish Health for Spirometry Testing

- Assistance in monitoring lung function in patients with asthma
- Referrals for simple spirometry do not require a National Jewish Health physician appointment
- National Jewish Health pediatric pulmonologists interpret results
- Quick and detailed reporting — including recommendations — sent to referring provider

Refer a patient for spirometry:
Physician Line 800.652.9555 (Main Campus)
303.708.3646 (Highlands Ranch)
or njhealth.org/professionals

National Jewish Health®
CONNECTIONS

National Jewish Health
1400 Jackson St., S757h
Denver, CO 80206

Inside This Issue

National Jewish Health®

A newsletter for health care providers

CONNECTIONS

Physician Line (consultations, referrals, resources) **800.652.9555**
Clinical Trials **303.398.1911**
Advanced Diagnostic Laboratories njlabs.org **800.550.6227**
Professional Education njhealth.org/cme **303.398.1000**
800.844.2305

National Jewish Health *Connections* is published to provide physicians and health care providers updates about services and clinicians at National Jewish Health. Please email the editor if you would prefer to receive it electronically.

Editor Rachel Kline, kliner@njhealth.org

4820.201113.MKT 1/2014