

CONNECTION

A newsletter for health care providers

Do You Have Patients with Joint Replacement Issues? Study Validates Nickel Blood Test

When infection and biomechanical issues have been ruled out, metal or bone cement allergy may be the cause. Indications may include:

- Chronic pain and swelling
- Dermatitis
- Impaired wound healing
- Chronic joint effusions
- Itching or burning
- Loosening

Karin Pacheco, MD, MSPH, director of the MetAlls Clinic at National Jewish Health, states, "We have seen more than 150 patients over the last two years for unexplained chronic problems after joint replacement. About half of them were allergic to either the metal in

the joint hardware or to the bone cement used to adhere the prosthesis."

The MetAlls Clinic offers individualized diagnostics for metal and bone cement allergy. The patch test panels include a selection of most metals used in orthopedic hardware, as well as the different components of bone cement. The nickel lymphocyte proliferation test has been validated against patch testing. In October, a summary of the study and results of the NiLPT validation were submitted by Dr. Pacheco for peer review and publication.

Indications for Referral

- Unexplained chronic pain and/or swelling following a joint replacement.
- Allergy information required for selection of index hardware, important for the patient with a prior history of metal or artificial nail sensitivity.

To refer a patient directly to the MetAlls Clinic at National Jewish Health, call Physician Line at 800.652.9555, choose option 2 and request extension 1723.



Positive tests for nickel and cobalt allergy, with negative reactions to other metals

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Science Transforming Life®

njhealth.org

Manage Asthma with Bronchial Challenge Testing

Pulmonary Physiology Services (PPS) at National Jewish Health is one of the largest pulmonary testing laboratories in the world and capable of the most unique, individualized diagnostics. Physicians may order testing through the PPS whether or not they have referred the patient to a National Jewish Health physician.

The PPS offers many advanced diagnostic tests, including the bronchial provocation or challenge.

Indications for Bronchial Challenge

Patients who present with unclear or nonspecific symptoms, e.g., symptoms of asthma with normal spirometry and no bronchodilator response.

Bronchial Challenge with Agents

Bronchial provocation (challenge) testing may be performed with a variety of agents and methods, including aerosolized nonspecific pharmacological agents such as methacholine and indirect mannitol inhalation powder. The tests are determined by the referring physician.

- Direct challenge tests use methacholine (the most commonly used agent), which acts directly on specific receptors on the bronchial smooth muscle, causing it to contract and yield more accurate results.
- Aridol® is an indirect bronchial challenge test approved by the FDA to assist in the diagnosis of asthma in patients 6 years and older with a baseline of 70 percent or more of predicted FEV₁. This testing method triggers the release of inflammatory mediators that cause bronchial smooth muscle to contract in sensitive individuals.

Patients having a positive test are given a bronchodilator treatment which reverses their hyperactivity reaction before they are allowed to leave National Jewish Health. A complete report from each of these tests includes a narrative interpretation by an attending pulmonologist and FEV₁ at each dose with PD (provocative dose) information indicating if the test is positive or negative.

**To refer a patient for
bronchial challenge testing,
call Physician Line at 800.652.9555.**

The screenshot shows the National Jewish Health website with a search bar at the top. Below the search bar, there are links for "Patient Information", "Programs & Services", and "Find a Doctor". A large banner on the left side of the page says "15 YEARS AT THE #1 RESPIRATORY HOSPITAL IN THE NATION". On the right side, there is a sidebar with "Referrals & Consults" and "Clinical Services" sections. The "Referrals & Consults" section has a "Referrals" link highlighted in yellow, and a "Order a Test" link below it. The "Clinical Services" section has a "Referring Providers: Order a Test" link. The main content area contains text about the hospital's mission and services, along with contact information for various departments like Radiology, Pathology, and Clinical Laboratories. At the bottom, there are logos for "BEST HOSPITALS" and "U.S. News & World Report".

Cardiac Catheterization Laboratory

National Jewish Health opened a Diagnostic Cardiac Catheterization Lab in 2011. Since that time, more than 150 diagnostic catheterization procedures have been performed. The Cardiac Catheterization Lab specializes in diagnostic procedures, including:

- Left and right heart catheterization
- Complex metabolic stress testing
- Nitric oxide delivery with right heart catheterization for pulmonary hypertension evaluation
- Transesophageal echocardiogram
- Cardioversion

Cardiac CT Exams Enhanced by Team Approach

Cardiac CT exams at National Jewish Health are performed in a multidisciplinary manner. Trained cardiology and radiology staff perform the scan together while cardiothoracic cardiologists and radiologists interpret the scans and results together.

Patient and Physician Benefits

- One patient appointment for the exam
- All interpretations by cardiologists and radiologists in one report
- Top U.S. thoracic radiologists and specially-trained cardiologists provide interpretations
- Unique protocols that obtain the most accurate results

To refer a patient directly to the Cardiac Division for cardiology testing services, call Physician Line at 800.652.9555, choose option 2 and request extension 2670.

**Call Physician Line at 800.652.9555.
to refer a patient to cardiology testing services.**

Additional Cardiology Testing Services Available

The Cardiology Department at National Jewish Health offers the following testing services for your patients:

- Complete Echo
- Agitated Saline Echo
- Stress Echo
- Transesophageal Echo
- Exercise Stress Testing
- Nuclear Stress Testing
- ECG
- Holter Monitors
- Ambulatory Blood Pressure Monitors

All stress-testing patients are screened by a specialized cardiopulmonary exercise physiologist several days before the scheduled testing. This approach ensures that the highest quality test results are attained while maintaining a safe patient experience. All testing is interpreted by an expert cardiologist the same day and the results are given to the ordering physician within 24 hours.

Refer patients for cardiac testing by calling Physician Line at 800.652.9555, choose option 2 and request extension 2670.

**For more information,
call Physician Line at 800.652.9555.**

Adult Neuropsychology Program Adds Services and Faculty

The National Jewish Health Neuropsychology program has increased their services and faculty to help meet your testing needs. Neuropsychological testing can assess functional ability and, at times, can detect abnormalities that are not evident on neuroimaging.

Evaluation Services Include

- Neurological disorders
- Traumatic brain injury
- Pre- and post-surgical assessments
- Pulmonary disorders
- Vascular disorders
- Immune and autoimmune disorders
- Environmental exposures
- Chronic conditions

Testing is customized to each patient's needs to identify possible cognitive issues in an objective environment.

An Assessment May Help Identify

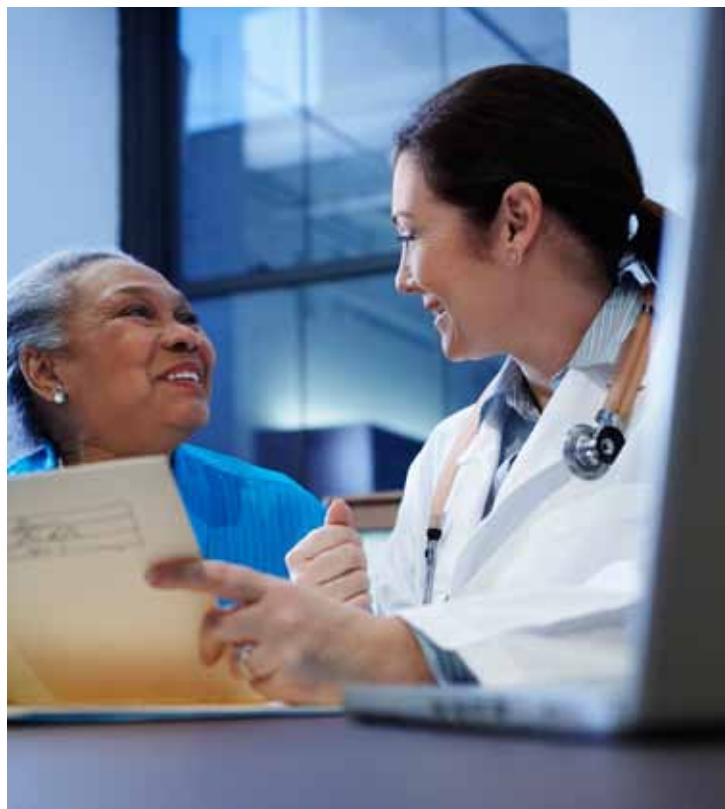
- Intellectual and academic functioning
- Attention
- Memory
- Problem solving and reasoning
- Language
- Visuospatial abilities
- Sensorimotor functioning
- Emotional adjustment and personality
- Motivation and effort

Testing Results

Referral providers receive (via fax) a comprehensive written report with results and recommendations, which may include:

- Determination of cognitive injury
- Differential diagnoses
- Establishing a baseline for potential change over time
- Details on brain dysfunction and the impact on daily life
- Recommended treatment plan

Our providers can review results with the patient and family at your request.



**Appointment availability has increased.
To refer patients, call 800.652.9555.**

Getting Kids to Exercise

The only center in Colorado focused on the evaluation and treatment of exercise tolerance in children is the Pediatric Exercise Tolerance Center at National Jewish Health. The Center is led by J. Tod Olin, MD, MScS, a pediatric pulmonologist trained in exercise intolerance and pediatric exercise physiology.

The Pediatric Exercise Tolerance Center evaluates exercise tolerance and treatment of exercise-related respiratory dysfunction in children. The program helps determine issues preventing children from exercising and then provides effective treatments to reverse the health impact of exercise intolerance.

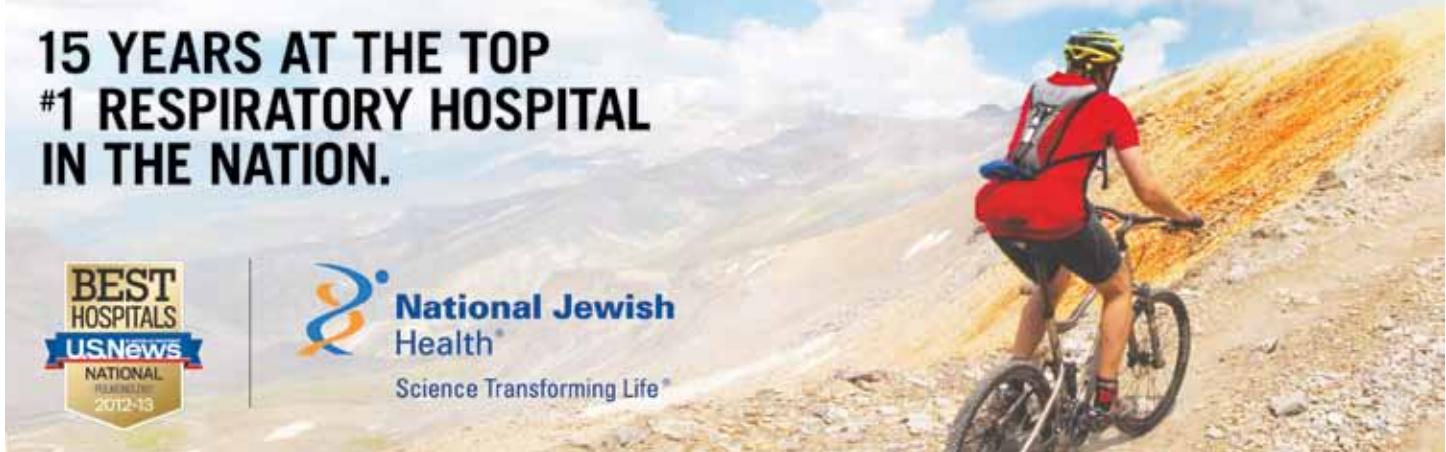
Indications for Referral

- Pediatric dyspnea unresponsive to current therapy
- Suspected or known exercise-induced asthma
- Suspected or known vocal cord dysfunction
- Exercise prescription needed (for obesity or other chronic illness)
- High-performance athletes with breathing difficulties

To refer a patient to Dr. Olin or for more information, **call Physician Line at 800.652.9555.** Visit njhealth.org/PETC to view a video and details on the Pediatric Exercise Tolerance Center.



A child performs an exercise tolerance test on a stationary bike while a nurse assesses pulmonary function levels in the Pediatric Exercise Tolerance Center.



**15 YEARS AT THE TOP
#1 RESPIRATORY HOSPITAL
IN THE NATION.**

BEST HOSPITALS
U.S. News
NATIONAL RANKING
2012-13

National Jewish Health
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U.S. News & World Report ranked National Jewish Health the top respiratory hospital in the nation for the 15th consecutive year.

"Fifteen years at the top is evidence of our continued commitment to the best coordinated care and the highest level of innovation," said Michael Salem, MD, President and CEO of National Jewish Health. "We are proud to hold this national number one ranking as rated by *U.S. News & World Report*. That singular distinction is something that Coloradans take pride in, and is an important resource for the nation."

National and Local Top Doctor Rankings

Twenty National Jewish Health physicians were ranked nationally by *U.S. News & World Report*

Twenty-two National Jewish Health physicians were ranked in *5280 Magazine* Top Doctors listings

For information on the National Jewish Health physicians who made the list, visit: njhealth.org/DenverTD2012 and njhealth.org/AmericaTD2012

Pulmonary Services Available in South Denver

For almost 40 years, the physicians at National Jewish Health in South Denver have provided specialized pulmonary, sleep and critical care medicine for adults in the south metro area. Our physicians are trained and experienced in a full range of onsite services:

- Comprehensive evaluations for all pulmonary conditions
- Pulmonary function tests and evaluations
- Chest X-rays
- 24/7 on-call coverage

- 24/7 Intensivist coverage
- Pulmonary consultations at Swedish, Porter, Littleton, Craig and select specialty hospitals
- Continuity of care for inpatients and outpatients
- Access to all National Jewish Health services

For a referral or consultation with one of the eight physicians at National Jewish Health South Denver, call 303.788.8500. We are located on the corner of East Hampden Avenue and South Logan Street.

To learn more about National Jewish Health South Denver, log on to njhealth.org/SouthDenver.

Schedule of Upcoming CME & CE Activities

Presented by the Office of Professional Education at National Jewish Health

LIVE EVENTS

ADVANCE REGISTRATION IS REQUIRED. For more information and to register, visit njhealth.org/proed or call 800.844.2305.

January 19-23, 2013

Snowmass Conference Center
Aspen/Snowmass, CO

**Clinical Diabetes and
Endocrinology in 2013**

Clinical dilemmas addressed include the practical management of Type 2 diabetes, thyroid dysfunction and use of ultrasound, low bone mineral density and osteoporosis, evaluation for cortisol excess, androgens in women, how the new ATP guidelines will affect cardiovascular risk stratification, hyperparathyroidism, and management of the post-bariatric surgery patient.

February 6-9, 2013

Keystone Conference Center
Keystone, CO

**The 35th Annual
Pulmonary and Allergy
Update at Keystone*±**

Presenting the latest knowledge and trends to apply in your practice regarding pulmonary, asthma, allergy and immunology topics.

April 10-13, 2013

Molly Blank Conference Center
at National Jewish Health
Denver, CO

The Denver TB Course*±

The longest running and most highly regarded TB course in the United States, now in its 49th year. Topics include:

- Epidemiology of tuberculosis
- Transmission and pathogenesis
- Diagnosis and treatment of tuberculosis, including MDR/XDR-TB
- Diagnosis and treatment of latent tuberculosis infection
- Emphasizing vulnerable populations such as pediatric and HIV co-infection

All activities are subject to change.

Certified for CME and Nursing Contact Hours ±*

ONLINE COURSES

For a complete list of live events, online courses
and CME credit approvals on each course,
visit njhealth.org/CME

- Airway Clearance Devices: Why Use Them?
- Cardiovascular Disease in Diabetes: The Silent Killer
- Eosinophilic Esophagitis: Principles & Practice
- Exertional Dyspnea: Insights and Advance in Diagnosis and Treatment
- Optimizing Asthma Care: Application of Guidelines for Diagnosing Severity and Initiating Therapy
- Opportunities to Improve Outcomes in Patients with Pulmonary Arterial Hypertension

- Optimizing Asthma Care: Application of Guidelines for Targeted Therapy and Clinical Control
- Sarcoidosis: Advances in Diagnosis and Management
- The Diagnosis and Treatment of Asthma in the Retail Clinic Setting: Challenges and Opportunities
- Guided Steps in Optimizing COPD Assessment and Management
- IBD: Crohn's Disease or Ulcerative Colitis?

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Physician Line (consultations, referrals, resources)	800.652.9555
Clinical Studies Adults	303.398.1911
Clinical Studies Pediatrics	303.270.2222
ADx Laboratories njlabs.org	800.550.6227
Professional Education njhealth.org/CME	800.844.2305

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