

THIS WEEK in the JOURNAL

ORIGINAL ARTICLE

Association between Susceptibility to Fungal Infections and a Mutation in *CARD9*

Homozygous mutations in the *CARD9* gene, with a premature termination codon, are associated with chronic mucocutaneous candidiasis in an Iranian family. Dysfunction of *CARD9* impairs the innate signaling of dectin-1, an antifungal pattern-recognition receptor.

SEE P. 1727; EDITORIAL, P. 1798

ORIGINAL ARTICLE

Three-Year Efficacy of Complex Insulin Regimens in Type 2 Diabetes

In this 3-year multicenter trial, patients with suboptimal glycated hemoglobin levels while receiving metformin and sulfonylurea therapy were randomly assigned to add biphasic, prandial, or basal insulin. During the first year, sulfonylurea therapy was replaced by additional insulin for unacceptable hyperglycemia or subsequently for a glycated hemoglobin level of more than 6.5%. Basal- or prandial-based insulin regimens more often achieved glycated hemoglobin targets. Fewer hypoglycemic episodes and less weight gain occurred with regimens initiated with basal insulin.

SEE P. 1736; EDITORIAL, P. 1801; CME, P. 1816

ORIGINAL ARTICLE

Antibiotic Prophylaxis and Recurrent Urinary Tract Infection in Children

This study from four Australian centers examined whether low-dose, continuous oral antibiotic therapy would prevent urinary tract infection in children (under the age of 18 years) who had already had one or more microbiologically proven urinary tract infections. Long-term, low-dose trimethoprim-sulfamethoxazole was associated with a modest decrease in the number of urinary tract infections in predisposed children.

SEE P. 1748; EDITORIAL, P. 1804

BRIEF REPORT

Human Dectin-1 Deficiency and Mucocutaneous Fungal Infections

A family with recurrent mucocutaneous candidiasis was evaluated for a potential genetic cause. An early-

stop-codon mutation in the β -glucan receptor dectin-1 was found in the affected family members. These data suggest an important role of dectin-1 in mucosal antifungal defense.

SEE P. 1760; EDITORIAL, P. 1798

CLINICAL PRACTICE

Postexposure Prophylaxis for HIV Infection

A 24-year-old man presents to an outpatient clinic, reporting that 36 hours previously he had receptive anal intercourse without the use of a condom with an anonymous male partner. The patient is known to the clinical practice and has had several negative tests for human immunodeficiency virus infection, most recently 6 months previously. How should he be evaluated and treated?

SEE P. 1768; CME, P. 1815

CURRENT CONCEPTS

Norovirus Gastroenteritis

Noroviruses are now recognized as the leading cause of epidemics of gastroenteritis and an important cause of sporadic gastroenteritis among both children and adults. In the United States, more than 90% of the outbreaks of gastroenteritis for which the cause could not previously be identified can now be attributed to this virus. Understanding the nature of immunity to the norovirus is a key determinant for future improvements in the control and prevention of this viral infection.

SEE P. 1776; CME, P. 1816

CASE RECORDS OF THE MASSACHUSETTS GENERAL HOSPITAL

A Man with Sore Throat, Fever, and Rash

A 20-year-old man was admitted to this hospital because of sore throat, fever, and a diffuse rash for 1 week. Testing for streptococcal pharyngitis and mononucleosis was negative. Amoxicillin and clavulanate were prescribed, and the next day, a red, itchy rash developed on the medial surface of his right arm; the lesions became raised, enlarged, and painful and spread from his arms to his legs, back, hands, feet, and perioral area, without mucosal involvement. Examination disclosed a diffuse eruption of tender violaceous-pink papulovesicles, which progressed to hemorrhagic crusting. A diagnostic procedure was performed.

SEE P. 1787