

# THIS WEEK in the JOURNAL

## ORIGINAL ARTICLE

### Quadrivalent Vaccine against HPV to Prevent High-Grade Cervical Lesions

In this large, randomized, placebo-controlled trial, a quadrivalent vaccine (including human papillomavirus types 6, 11, 16 and 18) given at day 1, month 2, and month 6 was associated with a significant reduction in the occurrence of cervical intraepithelial neoplasia. No beneficial effect was observed on prevalent lesions. The prevention benefit for incident lesions associated with HPV-16 and HPV-18 appears to increase with time.

SEE P. 1915; PERSPECTIVES, P. 1905 AND P. 1908; EDITORIALS, P. 1990 AND P. 1991; CME, P. 2015

## ORIGINAL ARTICLE

### Quadrivalent Vaccine against HPV to Prevent Anogenital Diseases

Human papillomaviruses are an important cause of genital warts and cervical cancer. In this large, randomized, placebo-controlled trial, a quadrivalent HPV vaccine given at day 1, month 2, and month 6 was found to significantly reduce the occurrence of cervical intraepithelial neoplasia and vulval or vaginal perianal lesions. No beneficial effect was observed on prevalent lesions. The benefit for prevention of incident lesions associated with HPV-16 and HPV-18 appears to increase with time.

SEE P. 1928; PERSPECTIVES, P. 1905 AND P. 1908; EDITORIALS, P. 1990 AND P. 1991

## ORIGINAL ARTICLE

### Case-Control Study of HPV and Oropharyngeal Cancer

This study offers persuasive evidence of a strong association between exposure to or oral infection with the human papillomavirus and oropharyngeal cancer. The data indicate that sexual behaviors can spread the virus to the oral cavity. The use of tobacco, alcohol, or both did not strengthen the association between exposure to HPV and oropharyngeal cancer. Among patients who had no evidence of exposure to HPV, however, tobacco and alcohol use were strongly associated with oropharyngeal cancer.

SEE P. 1944; EDITORIAL, P. 1993

## SPECIAL ARTICLE

### End-of-Life Practices in the Netherlands under the Euthanasia Act

In 1993, the Netherlands established a reporting procedure for euthanasia and physician-assisted suicide, and most physicians who followed the guidelines were not prosecuted. Euthanasia and physician-assisted suicide were not officially legalized until a law was passed in 2002. According to surveys of physicians conducted from 1990 through 2005, euthanasia and physician-assisted suicide have remained uncommon, and the rates declined modestly after the practices were legalized.

SEE P. 1957; PERSPECTIVE, P. 1911

## MECHANISMS OF DISEASE

### Sodium and Potassium in the Pathogenesis of Hypertension

This review examines epidemiologic, physiological, and molecular evidence that the interplay between sodium and potassium is central to the development of hypertension. The review concludes with recommendations for reducing sodium and increasing potassium in the diet.

SEE P. 1966; CME, P. 2014

## CASE RECORDS OF THE MASSACHUSETTS GENERAL HOSPITAL

### A 59-Year-Old Man with Fever and Pain and Swelling of Both Eyes and the Right Ear

A previously healthy 59-year-old man was admitted to this hospital with fever, weight loss, and painful swelling of both eyes and the right ear. Six weeks earlier, headache and fever had developed, followed by pain in the neck, pain and swelling of the eyes, and pain in the right ear; symptoms did not respond to antibiotic therapy. Laboratory studies on admission disclosed an elevated erythrocyte sedimentation rate and anemia. A diagnostic procedure was performed.

SEE P. 1980; CME, P. 2013

## CLINICAL IMPLICATIONS OF BASIC RESEARCH

### Cancer, p53, and Senescence

Experiments in mouse models of lymphoma, sarcoma, and hepatocarcinoma indicate that targeting p53 may be a sensible therapeutic strategy and that cellular senescence contributes to tumor regression.

SEE P. 1996