

# Pneumococcal Vaccine Prevents Septicemia in SLE

BY NANCY WALSH  
New York Bureau

LONDON — Despite concerns that the polyvalent pneumococcal vaccine may be inadequately protective in patients with lupus, most patients with severe disease can benefit from receiving it, Catherine Naveau, M.D., said at the Sixth European Lupus Meeting.

Invasive infections by common pathogens and opportunistic agents are frequent in patients with systemic lupus erythematosus and remain one of the leading causes of death, said Dr. Naveau of the rheumatology department, University Clinics Saint-Luc, Catholic University of Louvain, Brussels.

A review of the files of 208 patients from the Louvain lupus cohort identified 5 (2.5%) who had a history of pneumococcal septicemia prior to 1999.

“Since 1999 we have been vaccinating all our severe lupus patients with a polyvalent pneumococcal polysaccharide vaccine, and 5 years later we have not observed a single case of pneumococcal septicemia in vaccinated patients,” the rheumatologist said.

The five infected patients were female and ranged in age from 13 to 54 years. All had septic shock and unequivocal evidence on blood cultures of systemic *Streptococcus pneumoniae* infections, she said.

Three of the patients had infections of the central nervous system—two meningitis and one meningoencephalitis—one had bilateral pneumonia, and one had septic arthritis of the hip.

At the time of their infectious episode four of the five were being treated with corticosteroids, though at low to moderate doses ranging from the equivalent of 5 mg to 20 mg of prednisolone per day, Dr. Naveau reported in a poster session at the meeting, which was sponsored by the British Society for Rheumatology.

Only one was receiving a cytotoxic agent—intravenous cyclophosphamide.

All required treatment in the intensive care unit and survived without major organ damage, except for permanent bilateral hearing loss in one patient. “This series emphasizes the unusual incidence and severity of pneumococcal sepsis in systemic lupus erythematosus and suggests

that vaccination should be offered to severe lupus patients,” Dr. Naveau said.

The U.S. Advisory Committee on Immunization Practices, while not mentioning lupus specifically, recommends the pneumococcal vaccine for patients who are immunocompromised or are being treated with immunosuppressive therapies.

The Lupus Foundation of America has acknowledged that the antibody response to the vaccine is inadequate in patients

with severe lupus and in those being treated with corticosteroids and alkylating agents, but recommends it as being highly effective in the majority of lupus patients.

There have been reports of disease flares after vaccination with the pneumococcal vaccine, but in one of the largest reported series, no changes in lupus disease activity were seen in 73 patients following immunization with pneumococcal, tetanus toxoid (TT), and *Haemophilus in-*

*fluenzae* type B (HIB) vaccines (Arthritis Rheum. 1998;41:1828-34).

In addition, that study showed that the majority of patients developed protective levels of antibody to TT (90%) and HIB (88%). Protective antibody levels could not be determined for pneumococcus but almost half of the patients developed a fourfold antibody response. Antibody responses tended to be lower in patients with active disease who were being treated with immunosuppressive therapy. ■

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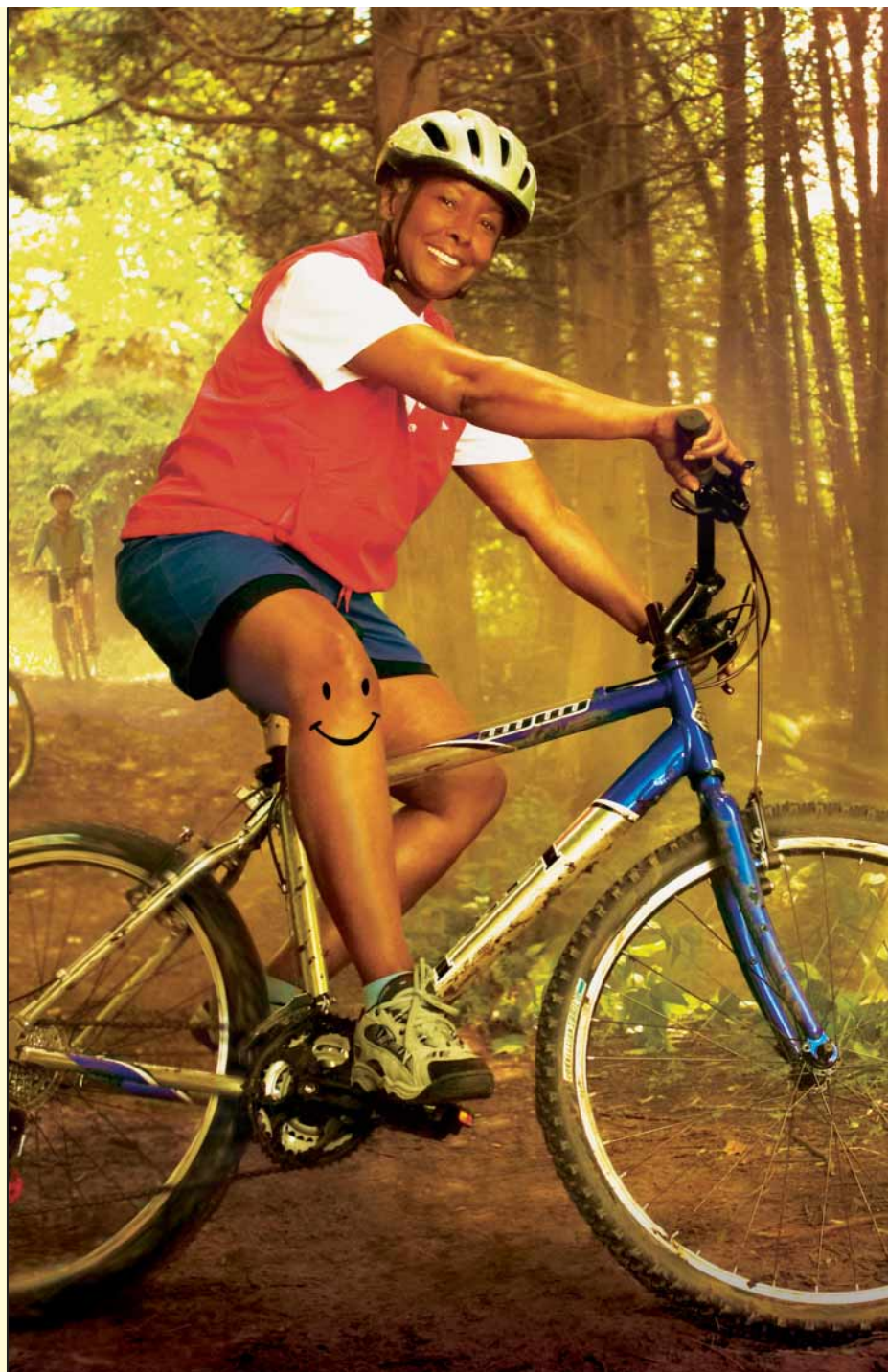
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## VERBATIM

*‘It looks from this study like we’re at the very beginning of being able to manipulate the direction in which the body’s immune responses will go.’*

Dr. J. John Cohen, professor of immunology at the University of Colorado, Denver, on the success of oral pig worm therapy in patients with Crohn’s, p. 36