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Introduction

One of Saul Krugman's favorite photographs recalls the day in 1965 when he handed his predecessor at New York University, L. Emmett Holt, Jr., a copy of the Festschrift in his honor. Some 25 years later, it is our privilege to similarly honor Saul. It continues a long tradition at Bellevue Hospital. A Festschrift was dedicated to Abraham Jacobi, the first Director of Pediatrics, some 100 years ago. Tradition plays an important role in Saul Krugman's life and in the history of medicine in New York City.

New York hospitals have long been involved with the sequestration and care of patients with infectious diseases. In fact, many municipal hospitals were established because of epidemics of smallpox, measles, typhus, yellow fever, cholera, and typhoid fever. To protect the general population from infections arriving on ships, quarantine sites were established on islands in New York Harbor and the East River. These quarantine hospitals became the pest houses. The word "pest" derives from the first of the three great scourges of mankind: pestilence, famine, and war.

As New York's municipal hospital system became better established, the pest houses evolved into infectious disease hospitals. The most famous of these was Willard Parker Hospital located on the East River on Manhattan's lower East side.

Saul was discharged from the Air Force in 1946 and joined an army of veterans seeking hospital training. Because of a delay in procuring a Pediatric residency at NYU-Bellevue, he took an interim position as resident physician at Willard Parker for six months. At the time all patients with infectious diseases in New York were funnelled into three specialty hospitals. Waves of children arrived at Willard Parker with scarlet fever, measles, pertussis, croup, and polio, filling wards to overflowing. Saul became an expert in infectious disease even before he began his pediatric residency! He maintained his affiliation with Willard Parker until it was closed 10 years later, signaling the end of an epoch as the result of medical advances. During those momentous years, Saul sharpened his clinical skills to an extraordinary degree, laying the groundwork for his future career in research and accumulating the experience that made the Krugman and Ward text, *Infectious Diseases of Children*, now in its 9th edition, an international success.

The past 100 years has seen the conquest in this country of most of the dreaded infections that concerned us at the opening of the century. Saul Krugman participated in many of those advances. It is part of the irony of medical progress that, as we congratulate ourselves on our success, a new threat has emerged which will tax our energies and resources for many years to come. The frightening dimensions of AIDS will stalk the 21st century.

Currently, however, a far more prevalent problem in world health is hepatitis, and it is in this area that Dr. Krugman has made his most significant contributions. The observations that he made in the 50's and 60's are culminating today in a surge of optimism that foresees worldwide control and possibly elimination of hepatitis A and B.

As another example of the ironies associated with medical progress, Saul's most productive years were also the most painful. Willowbrook State School was an institution for the mentally retarded, a breeding place for infectious diseases including hepatitis. It was an ideally controlled environment for the study of the natural history of diseases and of its control. Saul's efforts on behalf of the children at Willowbrook were received enthusiastically by concerned mothers, endorsed by administrative authorities, and meticulously reviewed at each step by scientific experts. The results of those efforts have earned him acclaim from the medical community and have made Dr Krugman one of the most decorated medical investigators of our day.

With the passage of time, it becomes more difficult to recall the passions aroused by Saul's work. The attacks were vociferous and personal, almost entirely from individuals who were not associated with Willowbrook and who were woefully ignorant of the details of the studies. It was a measure of Saul's dedication to medicine that he continued to work in the face of such virulent opposition.

Now in his 80th year, Saul remains interested and active, a popular lecturer, a model to the young investigator, a welcome consultant to individuals and governmental agencies, and a source of experience and wisdom accumulated over a lifetime. His is an outstanding career that it is our pleasure to honor.

Joseph Dancis, MD
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Perinatal Human Immunodeficiency Virus Infection: Ruminations on Mechanisms of Transmission and Methods of Intervention

William Borkowsky, MD, and Keith Krasinski, MD

ABSTRACT. Perinatal human immunodeficiency virus (HIV) infection is undoubtedly a multifactorial process. Neither the quantity of viremia nor the level of neutralizing antibody in the infected mother is alone predictive of HIV transmission to her offspring. Additional cofactors may include the ability of maternal immunity to control the host cell range and rate of viral replication. The placenta probably constitutes an effective barrier to viral transmission unless disrupted by processes such as syphilis. Prevention of such breaks in the trophoblast barrier and efforts to stimulate maternal and newborn HIV-specific immunity may further decrease the perinatal transmission rate. *Pediatrics* **1992;90:133–136;** ***human immunodeficiency virus, perinatal, infection, immunity.***

Sexual Abuse and Corporal Punishment During Childhood: A Pilot Retrospective Survey of University Students in Costa Rica

Scott Krugman; Leonardo Mata, MPH; and Richard Krugman, MD

ABSTRACT. A sample of 497 students at the University of Costa Rica completed a survey on perceptions and experiences with various forms of punishment and experiences with sexual abuse during childhood. Spanking was shown to be the most widely accepted and most common form of discipline. The majority of the students considered most types of punishment forms of abuse. This study lacks a comparison group and cannot be generalized to the entire Costa Rican population. The section on sexual abuse demonstrated that 32% of the women and 13% of the men experienced some type of sexual abuse during childhood. The abuse mainly occurred between the ages of 5 and 10, and men were most often perpetrators. *Pediatrics* **1992;90:157–161;** ***corporal punishment, sexual abuse, child abuse, Costa Rica.***

Prospects for Control of Hepatitis B Virus Infection: Implications of Childhood Vaccination and Long-term Protection

Cladd E. Stevens, MD; Pearl T. Toy, MD; Patricia E. Taylor, PhD; Thomas Lee; and Hoo-Yi Yip

ABSTRACT. Hepatitis B vaccine has been recommended for high-risk individuals in the United States for more than a decade. This targeted strategy, however, has failed to control hepatitis B virus (HBV) infection. Universal immunization is being considered as an alternative approach, in particular the inclusion of hepatitis B vaccine with routine childhood vaccinations. Data presented herein demonstrate a high degree of efficacy for hepatitis vaccine with hepatitis B immune globulin in preventing perinatal HBV infection in newborns. Immune response to vaccine was dependent in part on the dose administered, with some enhancement of response if the infant was older at the time of initial injection or if the booster dose was given later. Long-term follow-up showed persistence of vaccine-induced antibody for 5 to 10 years in 90% of immunized infants and adults. Only 3% to 5% of these high-risk individuals had serologic evidence of an HBV infection. None of the infections had been symptomatic and none resulted in a chronic HBV carrier state. Thus, immune responses and efficacy of hepatitis B vaccine in infants were excellent, and immunity and protection against clinically significant HBV infection persisted for at least 5 to 10 years, features essential to success of a program of universal childhood immunization against HBV. *Pediatrics* 1992;90:170–173; *hepatitis B virus, vaccination, immunization.*

The Introduction of Human Immunodeficiency Virus Into the North Carolina Pediatric Population

Cameron Grant, MB, ChB; Ross E. McKinney, Jr, MD; Chris Weedy, MSW; Samuel L. Katz, MD; and Catherine M. Wilfert, MD

ABSTRACT. The authors reviewed the means by which human immunodeficiency virus (HIV) seropositivity was acquired for the 134 seropositive children seen at Duke University Medical Center prior to September 1990. Perinatal transmission occurred in 111 (83%) and blood product transmission in 15 (11%). Of the 108 mothers (there were three sets of siblings) responsible for perinatal transmission, 44 (41%) had acquired their infection while residing in North Carolina. Intravenous (IV) drug use by the mother or her sexual partner was the significant risk factor for maternal infection in 91 (84%) of the total cases and in 38 (86%) of the 44 women infected in North Carolina. The proportion of women who acquired their HIV infection from a sexual partner who was an IV drug user was significantly greater for mothers who were resident in North Carolina when infected compared with mothers infected elsewhere ($P < .001$). On the basis of admissions to drug treatment programs during the 1990 fiscal year, cocaine is the predominant IV drug used in North Carolina. Admissions to cocaine abuse programs occurred throughout the state, and mothers who acquired HIV infection from IV drug use were more likely to live in counties with a higher frequency of cocaine abuse treatment. *Pediatrics* **1992;90:174–177;** ***human immunodeficiency virus, seropositivity, intravenous drug abuse.***