Drugs of Abuse, Immunity and Immunodeficiency. Edited by Herman Friedman, Steven Specter, and Thomas W. Klein. Plenum Press, New York, 1991, xii + 317 pp., ISBN 0-306438-90-9. $79.50.

This compilation of current research studies was based on the International Conference on Drugs of Abuse, Immunity and Immunodeficiency held in Clearwater Beach, Florida, December 13–15, 1989, sponsored by the University of South Florida College of Medicine, with the support of the National Institute of Drug Abuse.

The book is organized sequentially around the major drugs of abuse. The first such drug reviewed is Marijuana with 11 chapters, covering primarily human subjects and secondarily animal studies. The following two chapters are devoted to the effects of cocaine on the immune system and a thorough review of the effects of opiates are presented in eight chapters. The last section includes four chapters on the effects of ethanol, one on the effects of inhaled isobutyl nitrite and one on the effects of conthaxanthin (4,4′-diketo analogue of beta-carotene).

Of special interest are the reports of immunological effects of drugs of abuse in human subjects, both *in vivo* and *in vitro* in addicts as well as in normal volunteers. Thus, Nahas and Osserman report on Altered Serum Immunoglobulin Concentration in Chronic Marijuana Smokers, Donald reviews Advanced Malignancy in the Young Marijuana Smoker, while Specter and Lancz present convincing data on the Effects of Marijuana on Human Natural Killer Cell Activity, and Djeu, Wang, and Friedman review the Adverse Effect of delta-9-tetra-hydrocannabinol on Human Neutrophil Function.

Finally, the effects of drugs of abuse on infections are presented by Bradley, Peterson, *et al.*, as well as Chao *et al.* Of immediate clinical importance, Peterson *et al.*, report that morphine promotes the growth of the AIDS virus (HIV-1) in peripheral blood mononuclear cells taken from HIV-1 infected patients. This study as well as the other reports in this book strongly support the concept that drugs of abuse may not only impair immunity resulting in increased incidence of infections, but may also act as cofactors to the increased replication of HIV in drug users.

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