

## **Medical Complications of Alcohol and Cocaine Abuse**

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# Overview

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The magnitude of the problem of illicit cocaine use is only beginning to be recognized by many physicians. As a result, they are only now beginning to include an illicit drug-associated/induced phenomenon as a potential problem within the differential diagnosis created for each new patient they see. It is anticipated that the following four chapters will increase the awareness of physicians and health care workers in both clinic and hospital settings concerning the common important medical problems associated with illicit cocaine use.

Cocaine-associated pathology in any one of these organ systems can be intrinsically lethal. In humans, potentially lethal cases, if not recognized for what they are, can be made worse and thereby lethal as a result of inappropriate, but well-intended medical or surgical treatment.

As noted in each of the chapters, most, if not all, of the toxicity of cocaine is a consequence of its action to impair neuronal reuptake of adrenergic neurotransmitters. The resultant increased local concentration of adrenergic neurotransmitters produces local, usually transient, severe, high-grade vasoconstriction. Not all the untoward effects of cocaine abuse are a direct result of its vasoconstrictive activity, however; some, particularly the pulmonary, intestinal, and hepatic complications associated with cocaine use, may be more a result of the postvasoconstrictive compensatory vasodilation response that occurs in the involved organ and the resultant reperfusion injury. Such injuries are associated with the development of hemorrhage and the production of toxic free radicals that markedly exacerbate any preexisting injury produced during the ischemic phase, thereby creating a severe injury.

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