Pewne nadzieje można również wiązać ze związkami blokującymi działanie kokainy na neuronalny wychwyt dopaminy.

Słowa kluczowe: kokaina, crack

Bogdan Szukalski

Cocaine

Summary

The main stages of the cocaine story are reviewed here: discovery of the coca leaves' properties, isolation of the alkaloid, determination of it's structure, first laboratory synthesis, development of the illicit cocaine market and it's rapid development following the introduction of cocaine free base (i.e. crack). Metabolic transformations of cocaine, as well as interactions of cocaine and ethanol metabolism in humans are discussed. Short review of analytical methods for the determination of the drug and it's metabolites in biological material is presented. Current views on the mechanisms by which cocaine causes euphoria and leads to dependence, with particular attention given to dopamine reuptake inhibition, are also discussed.

A separate chapter is devoted to the detrimental effects of cocaine upon human body, particularly the cardiovascular, respiratory, and nervous systems and the proposed mechanisms of cerebral strokes among young cocaine abusers. The effects of cocaine on gestation and the health of newborns of cocaine abusing mothers is also discussed.

And finally, the difficult and controversial problem of therapy for cocaine addicts. In recent years, classical pharmacological and psychological methods were augmented by trials of anti-cocaine antibodies (i.e. active and passive immunization). Should these trials succeed, such methods could be applied to other kinds of drug dependence. Some hopes are also linked with the substances which block cocaine action upon dopamine reuptake by neurons.

Key words: cocaine, crack

Piśmiennictwo

1. Andrews P., *Cocaethylene toxicity*, J. Addict Dis., 1997, 16, 75-84.
2. Ball S.A., Carroll K.M., Babor T.F., Rounsaville B.J., *Subtypes of cocaine abusers: Support for type A-type B distinction*. J. Consulting and Clin. Psych., 1995, 63, 115-24.
3. Baumann M.H., Char G.U., De Costa B.R., Rice K.C., Rothman R.B., *GBR 12909 attenuates cocaine-induced activation of mesolimbic dopamine neurons in the rat*. J. Pharmacol. Exp. Therap., 1994, 271, 1216-22.
4. Benowitz N.L., *How toxic is cocaine?* In: Cocaine: Scientific and social dimensions. Wiley, Chichester, Ciba Foundation Symposium, 1992, 166, 125-48.