



A Case of Mandrake Poisoning

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LETTER TO THE EDITOR

A Case of Mandrake Poisoning

Mandrake is the common name of *Mandragora officinarum*. It is native in Greece and in other Mediterranean countries. The plant has been known from ancient time for its pharmacological effects in man [1]. It was used as an hypnotic, analgesic, or anesthetic drug because of its depressive action on the central nervous system, and in the Orient and in Northern Africa it was employed for criminal purposes [2, 3]. A case of unusual poisoning from mandrake fruit in an adult man is described.

A 55-year-old male tourist ate 10 mandrake fruits when he was in the island of Dilos. Half an hour later he started complaining of visual abnormalities and anxiety. On examination 1 h later he was found to have tachycardia (160), pupil dilatation, and flushing on the face. Apomorphine (5 mg) was injected IM and he vomited repeatedly. Three hours after the ingestion the patient was confused with CNS depression. At that time 1 mg of prostigmine was injected IM in an attempt to overcome the symptoms. Following three doses of prostigmine in a half hour interval, the pulse rate fell to 100 but the patient was still confused and depressed. During the next 3 h he started gradually improving, and 20 h from the ingestion of the mandrake fruit he was free of symptoms.

Mandrake root, fruit, and leaves contain hyoscyamine, scopolamine, pseudohyoscyamine, and mandragorine (cuscohygrine) [4]. The symptoms therefore produced after the ingestion of the plant are those caused by the above alkaloids. Poisoning from mandrake is accidental in adults who eat the leaves which resemble those of a lettuce and in children who accidentally eat the apple-like sweetish fruit. A few cases of poisoning have been reported from tea preparation containing mandrake with other herbal products and used as hallucinogens [5]. Physostigmine is the drug of choice for the treatment of both the peripheral and central action of the mandrake. In our case prostigmine was used instead of physostigmine due to our difficulty in obtaining the latter. The peripheral symptoms therefore disappeared while the symptoms from the CNS continued to exist.

The authors believe that the early induction of vomiting was the main reason for recovery of this patient, because the 10 fruits con-

tained large amounts of the toxic alkaloids. The authors wish to point out that cases of poisoning by mandrake are very rare in Greece because the toxicity of the plant is well known to the local people.

REFERENCES

- [1] N. Taylor, Plant Drugs That Changed the World, Allen and Unwin, London, 1965, pp. 136-138.
- [2] C. Thienes and T. Haley, Clinical Toxicology, 5th ed., Lea and Febiger, Philadelphia, 1972, p. 14.
- [3] R. Fabre, R. Truhant, and M. T. Regnier, Traitement d'urgence des Intoxications, Doinss, Paris, 1957, p. 539.
- [4] R. E. Schultes and A. Hofman, The Botany and Chemistry of Hallucinogens, 2nd ed., Thomas, Springfield, Illinois, 1980, pp. 296-299.
- [5] J. M. Arena, Poisoning, 4th ed., Thomas, Springfield, Illinois, 1978, p. 546.

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