

Date: October 11, 1996

HC 10-11-6-1

TO: General Distribution

**RE: Review of History and Uses of Mayapple
(Podophyllum) and its Derivatives**

Brinker, Francis. Podophyllum And Podophyllin. *The Eclectic Medical Journals*, Vol. II, No. 2, April/May 1996, pp. 2-5.

The root or rhizome of the American mandrake (*Podophyllum peltatum*), first used medicinally by Native Americans, was studied by the Eclectics in the 19th century. Dr. John King “discovered” the root’s active resinous compounds in 1835. The resin of podophyllum was named “podophyllin” and was manufactured by William S. Merrell’s pharmaceutical company in Cincinnati. (Podophyllin is actually not a true resin but a compound substance.)

Podophyllum and podophyllin were used for similar purposes: as a purgative, an alterative, for stomach problems, and to stimulate salivation. Large doses were used to increase hepatic and intestinal secretions. Both were used to treat dropsy, due to the amount of watery discharge they produced. The doses of podophyllum and podophyllin were dependent on the intended use. The root was official in the USP from 1820 to 1946.

Toxicity was a serious concern with podophyllum and podophyllin. Cases of poisonings with these products resulted in prolonged neuropathy, and there were several deaths reported as well. Animal studies showed that podophyllotoxin was especially toxic to unborn fetuses.

Podophyllin was eventually introduced in 1942 as a topical remedy for condyloma acuminata. It has also been the treatment of choice for genital warts. Still, serious or fatal poisonings have been known to occur, even with topical application only. It appears, however, that podophyllin is not carcinogenic. The chemotherapeutic drug Etoposide, a semi-synthetic derivative, is extremely active, in fact, against several types of cancers, including small cell lung cancer, testicular carcinoma, acute nonlymphocytic leukemia, and lymphoma. Further studies are called for. —*Ginger Webb*

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