



Rauwolfia Serpentina:
The First Herbal Antipsychotic

Over two millennia before chlorpromazine was synthesized, ancient India was already using an herbal antipsychotic: *Rauwolfia serpentina*. This herb and its synthetically developed ingredient, reserpine, were the first antipsychotics used by humanity. The ancient texts of Hindu Ayurvedic medicine describe the use of *R. serpentina* in the treatment of "insanity" (*Oonmaad* in Sanskrit). *Oonmaad* appears to be a description of psychosis defined by the ancient Ayurvedic physician Charka (circa 1000 B.C.) as an abnormal condition of the mind, wisdom, perception, knowledge, memory, character, creativity, conduct, and behavior.

In 1931 Sen and Bose published a seminal paper describing the tranquilizing and antihypertensive effects of *R. serpentina* roots. However, their publication in an Indian journal did not reach the attention of the global scientific community until 1949, when another Indian physician published an article about *R. serpentina* in the British literature. In 1952 reserpine was isolated from *Rauwolfia* extracts and later was synthesized. In 1954 Nathan Kline pioneered the use of reserpine in the treatment of psychotic patients. Arvid Carlsson (Sweden) discovered the central nervous system neurotransmitter properties of dopamine while in pursuit of the mecha-

nism of action of reserpine. Later, reserpine came into relative disuse because of its unpleasant side effects, including depression. Over the last decade there has been a resurgence of interest in *R. serpentina* in India. Recently, *Rauwolfia* extract was shown to have a high affinity for central α_2 and dopamine D_2 receptors. These intriguing findings will likely stimulate further interest in *R. serpentina*.

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