Apomorphine and Other Dopaminomimetics

Volume 2
CLINICAL PHARMACOLOGY

Editors
Giovanni Umberto Corsini
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Preface

Apomorphine was discovered in 1869 as a by-product of morphine, and has for many years been considered primarily for its emetic properties—in spite of its ability to produce other peripheral and central actions. In addition to its morphine-like actions, apomorphine exerts cardiovascular and hypotensive effects, selectively alters gastric motility, and induces a variety of stereotyped behaviors. Increased attention was given to apomorphine when it was found to have sedative properties, which made it a valuable aid in treating agitated patients, and in 1951 when Schwab described its usefulness in the treatment of Parkinson's disease.

The popularity of apomorphine, however, is linked to that of dopamine, which has also been considered a "cinderella" drug among neurotransmitters. The relationship of apomorphine to dopamine was clarified significantly by Ernst in 1967, whose studies indicated the existence of structural similarities between the two drugs, thus explaining the dopaminergic nature of apomorphine's effects. Apomorphine has since been known as a specific tool for the study of dopamine function in animals and humans. Research focusing in this direction has led to the development of several analogs with dopaminergic properties and of newly synthesized agonists, which have proven to be valuable pharmacological agents with a myriad of useful therapeutic applications.

Apomorphine and Other Dopaminomimetics is a two-volume set which organizes the material in this field into basic and clinical research. *Volume 1: Basic Pharmacology* is a comprehensive treatise on various aspects of the use of apomorphine and related dopaminomimetics to disclose central and peripheral roles of dopamine in regulating physiological functions such as motor activity, sleep, wakefulness, food intake, hormonal control, blood pressure, and diuresis. *Volume 2: Clinical Pharmacology* deals with the clinical aspects of dopamine agonists in relation to schizophrenic and affective disorders, Parkinson's disease and dyskinesias, sleep, pituitary hormone interactions, aging, and arterial pressure control.

These two volumes represent the establishment of apomorphine as an invaluable tool in basic and clinical research in the neurosciences, and will be of interest to pharmacologists as well as neuroscientists.

Acknowledgments

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