Natural Anthraquinone Drugs

Pharmacology 1980;20(Suppl 1):I-V

Proceedings of the 2nd Symposium on the Anthraquinone Laxatives, held on the Bürgenstock (Lucerne), September 10–14, 1978

Editor
/ W. Fairbairn, London
70 figures and 27 tables
S.Karger · Basel · München · Paris · London · New York · Sydney
Pharmacology International Journal
Vol. 20, Supplement 1, 1980 of Experimental and Clinical Pharmacology
Editors
K. Lederis, Calgary; K.F. Sewing, Tübingen;
E.S. Vesell, Hershey, Pa.
S. Karger AG,
P.O. Box, CH-4009 Basel (Switzerland)
Printed in Switzerland by Thür AG Offsetdruck, Pratteln
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Preface

It is a pleasure to express very sincere thanks to Lehner AG of Basel, Switzerland, for repeating their imaginative idea and arranging a Second Symposium on anthraquinones in Lucerne, September 1978, 3 years after the first one held in Lugano. The same formula of a good mix of experts from a wide range of microdisciplines discussing a limited topic has once more produced some very profitable sessions. The following papers represent the outcome of these proceedings. It is surprising to see how much additional information on anthraquinone laxatives has come to light during the short interval between the two Symposia. Of particular interest is the change in emphasis from mainly chemical and pharmacological study to the present Symposium, which is very much concerned with the mode of action at a biochemical and cellular level and with work on human beings as well as animals. This attempt to probe the problem in greater detail demands methods of analysis of an increased sensitivity and precision and two of the papers deal with this problem.

The intimate study of the mode of action of anthraquinones seems to indicate that their main action is concerned with the transport of water and ions across the intestinal membrane, leading to increased luminal volume. If this is established then their action is rather similar to the natural action of purgation and, therefore, it is probably misleading to refer to anthraquinone laxatives as ‘irritant purgatives’.

A further innovation at this second Symposium has been an attempt to survey other uses for anthraquinone compounds, especially in skin diseases. However, this does not seem to exhaust the possibilities of these interesting chemicals and one of the chapters gives a stimulating account of the therapeutic possibilities arising from the ease with which certain anthraquinones chelate with metal ions. One other possibility has come to light in a paper from Shanghai received after the Symposium, as the authors were unable to attend. It will be seen that this paper describes the successful treatment of upper gastrointestinal tract bleeding with Chinese rhubarb. It may be, however, that the tannins in the crude drug rather than the anthraquinones are the main curative principles.

As on the previous occasions, the discussions were tape recorded but the verbatim reports have been modified for the written account, of which Prof. J.W. Fairbairn has been the Editor.
F.H.L. van Os undertook the difficult task of making the verbatim drafts of the discussion from the tapes, and also acted as a co-chairman with Prof. D.D. Breimer. Mr. Walter Hurni, Director, Lehner AG, organised every detail of the Symposium with his usual quiet efficiency and thoughtfulness and I would like to express the sincere thanks of all the participants to him. Prof. J.W. Fairbairn, Department of Pharmacognosy, School of Pharmacy, 29/39, Brunswick Square, London, WC1N 1AX (England)