Psychological Medicine

MONOGRAPH SUPPLEMENT 16

The cardiovascular effects of antidepressants by S. J. Warrington, C. Padgham and M. Lader

Cambridge University Press

The cardiovascular effects of antidepressants

Depression is one of the commonest psychiatric disorders and antidepressant drugs of various types are useful in its treatment. However, many of these drugs have a wide range of side effects which may limit both the choice of medication and the dosage eventually attained. Cardiovascular side effects present particular problems because they are common and may present some hazard, especially in the elderly and those with pre-existing cardiovascular pathology. As depression is commonest in the elderly, difficult therapeutic situations frequently occur.

The prototypal antidepressants had a marked propensity to induce cardiovascular side effects. In the past decade or so, several newer compounds of different chemical and pharmacological types have been introduced. Almost all have been developed with fewer and less severe cardiovascular effects as a main aim. In particular, safety in overdosage has been sought.

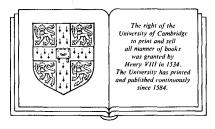
This monograph reviews the cardiovascular effects of the various types of antidepressants in clinical use. The frequency, severity and clinical importance of these effects are placed in perspective. The first section deals with effects on blood pressure: postural hypotension is common and may be dose-limiting and hypertensive crises may occur with the MAOIs. Cardiac contractility is discussed in the second section but is not generally impaired by antidepressants. The third section covers the complex and important issue of cardiac conduction and arrhythmias. Marked differences between the various types of antidepressant are noted. Reports of an association between the therapeutic use of tricyclic antidepressants and sudden death are unconvincing. The last area is that of overdose and, again, antidepressants differ substantially in their toxicity.

Finally, the use of various antidepressants in patients with hypertension, cardiac failure, angina pectoris, myocardial infarction, and cardiac arrhythmias is discussed and guidelines suggested for the selection and use of antidepressant medication.

Psychological Medicine

S. J. Warrington, C. Padgham and M. Lader The cardiovascular effects of antidepressants

MONOGRAPH SUPPLEMENT 16



CAMBRIDGE UNIVERSITY PRESS

Cambridge New York Port Chester Melbourne Sydney

PUBLISHED BY THE PRESS SYNDICATE OF THE UNIVERSITY OF CAMBRIDGE

The Pitt Building, Trumpington Street, Cambridge CB2 1RP 40 West 20th Street, New York N.Y. 10011, U.S.A. 10 Stamford Road, Oakleigh, Melbourne 3166, Australia

© Cambridge University Press 1989

Printed in Great Britain by the University Press, Cambridge

CONTENTS

Synopsis	page 1
Introduction	3
Effects on blood pressure	3
Typical tricyclic antidepressants	4
Amoxapine	6
Maprotiline	6
Atypical antidepressants	6
Mianserin	6
Trazodone Viloxazine	8
Fluvoxamine	8
Fluoxetine	8
Zimeldine	9
Nomifensine	ý 9
Bupropion	ý 9
MAOIs	ý
Lithium	10
Miscellaneous	10
Comment	10
Cardiac contractility	11
Typical tricyclic antidepressants	12
Maprotiline	13
Atypical antidepressants	13
Mianserin	13
Trazodone	13
Viloxazine	13
Fluvoxamine	14
Fluoxetine	14
Zimeldine	14
Nomifensine	14
MAOIs	14
Lithium	14
Miscellaneous	14
Comment	14
Cardiac conduction and dysrhythmias	14
Typical tricyclic antidepressants	15
Amoxapine	17
Maprotiline	17
Atypical antidepressants	17
Mianserin	17
Trazodone	18
Viloxazine	18
Fluoretine	19 19
CUMYEUDE	19

iv Contents

Zimeldine	19
Nomifensine	19
Bupropion	19
MAOIs	19
Lithium	19
Miscellaneous	20
Carbamazepine	20
ECT	20
Comment	21
Sudden death	21
Comment	23
Overdose	23
Atypical antidepressants	27
Mianserin	27
Trazodone	27
Viloxazine	27
Fluvoxamine	27
Fluoxetine	27
Zimeldine	27
Nomifensine	29
MAOIs	29
- Lithium	29
Miscellaneous	29
Comment	29
Conclusions	30
Hypertension	30
Cardiac failure	30
Angina pectoris	30
Myocardial infarction	30
Arrhythmia	31
Patients without known cardiovascular disease	31
Safety in overdosage	31
References	32