



CHAPTER 18

Effects of Psychiatric Drugs on Blood Pressure

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INTRODUCTION

Psychiatric drugs have various cardiovascular effects, making it compulsory for clinicians to regard blood pressure when choosing medications to treat psychiatric illnesses. Especially patients with cardiovascular or cerebrovascular diseases necessitate careful medication selection and dose titration to treat acute or chronic psychiatric symptoms. Psychiatric medications may affect blood pressure directly and indirectly. The direct effects arise from the acute effects of psychiatric medications and drug interactions, whereas the indirect effects result from long-term adverse effects like metabolic syndrome (1). Some psychiatric drugs may cause blood pressure to rise or fall in some patients, while others may not have a significant effect on blood pressure. This chapter will briefly discuss the effects of psychotropic medications on blood pressure.

ANTIDEPRESSANTS

Antidepressant drugs are indicated for the treatment of various psychiatric diseases, mainly depression and anxiety disorders, and classified according to mechanism of action. These include selective serotonin reuptake inhibitors (SSRIs), serotonin and norepinephrine reuptake inhibitors (SNRIs), tricyclic antidepressants (TCAs), and Monoamine Oxidase Inhibitors (MAOIs), selective norepinephrine reuptake inhibitors (NARI), norepinephrine and dopamine reuptake inhibitors (NDRI), noradrenergic and specific serotonergic antidepressants (NaSSA), serotonin antagonist and reuptake inhibitors (SARI), melatonin agonists, N-methyl-D-aspartate antagonists, and multimodal antidepressants.

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Esketamine nasal spray	transient increase in blood pressure, avoid to use in patients that blood pressure increase poses high risk.
Antipsychotics	high risk for orthostatic hypotension, the highest risks for clozapine, quetiapine, chlorpromazine, monitor carefully
Benzodiazepines	may cause orthostatic hypotension, especially in elderly people, need careful assessment
Mood stabilizers (lithium, valproate, carbamazepine, lamotrigine)	except some rare cases there is no significant effects on blood pressure, consider drug interactions when using lithium or carbamazepine
Methylphenidate	increase blood pressure, had better to avoid in hypertensive patients
Atomoxetine	increase blood pressure, had better to avoid in hypertensive patients
Modafinil	increase blood pressure, had better to avoid in hypertensive patients

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