COGNITION AND DEPRESSION: MANAGEMENT OF MAJOR DEPRESSIVE DISORDER COGNITIVE SYMPTOMS

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INTRODUCTION

- Depression is the leading cause of disability, affecting over 300 million people worldwide (1).
- Major Depressive Disorder (MDD) symptoms can be divided into emotional, physical and cognitive symptoms (2).
- Cognitive symptoms are the main mediators of functional outcomes (3) and have a significant impact on the risk of recurrence of depression (4).
- No drug is FDA-approved to treat cognitive impairment in MDD.
- The aim of our poster is to identify and compare different therapeutic strategies for cognitive symptoms of MDD.

METHODS

A non-systematic review of the literature in international databases regarding cognitive symptoms therapeutic approach in MDD.

RESULTS

The treatment effect on cognitive dysfunction can be direct or indirect. An indirect effect occurs via the improvement in patients’ mood state. A direct effect occurs by direct improvement in cognitive function.

SSRIs

SSRIs reduce the response of the amygdala by reducing the emotional reactivity to the stimuli (5). Escitalopram, paroxetine, and fluoxetine have shown a significant effect on cognitive improvement (6,7).

SNRIs

SNRIs increase the activity of the cingulate cortex and thalamus, increasing emotional regulation (5). Venlafaxine and duloxetine were associated with cognitive enhancement (8,9).

OTHER ANTIDEPRESSANTS

A small study demonstrated cognitive gains with bupropion (10). Vortioxetine was the only antidepressant agent showing relatively strong evidence of a positive effect on multiple cognitive domains, namely on executive function, attention, processing speed, learning and memory (4). Vortioxetine was the antidepressant with more evident cognitive gain, mainly due to a pro-cognitive direct effect (4,11,12).

OTHER STRATEGIES

Psychostimulants show potential utility as cognitive potentiation therapy (13). The risks arising from its use can outweigh the cognitive benefits (14). Other strategies like some psychotherapies, ECTs, and exercise seem to positively influence cognition (15-17).

DISCUSSION

- Studies on antidepressants have almost always treated cognitive impairment as a secondary endpoint.
- The treatment of cognitive impairment in depression should focus on alleviating mood symptoms, which will lead to indirect pro-cognitive action.
- For patients with significant cognitive impairment, treatment with an agent with direct efficacy in cognition may be warranted.
- Cognitive potentiation strategies such as some psychotherapies and exercise could be implemented.

CONCLUSIONS

- ✓ Cognitive function should be properly assessed in patients with MDD.
- ✓ Cognitive function should be a critical target of therapy in these patients
- ✓ There are no approved drugs to treat MDD cognitive symptoms.
- ✓ The cognitive effects of antidepressants result from their indirect action through improved mood but also from their direct action on cognition.
- ✓ There are antidepressants, namely vortioxetine, with a better profile for cognition.
- ✓ Further investigation is necessary for clarify the potential role of psychostimulants in cognitive improvement.
- ✓ Non-pharmacological strategies such as psychotherapies, ECTs, and exercise seem to improve cognition in patients with MDD.

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