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Treatment of Resistant Depression

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Abstract

- Depression is a common and debilitating disease complicated by comorbidities, medication side effects, limited alternative treatment options, and poor patient adherence.
- Currently, clinical practice guidelines are available outlining the indications and treatment options for depression.
- Discussion will involve pathophysiology of the disease process and possible treatments, such as pharmacotherapy, cognitive behavioral therapy and somatic therapy, including electroconvulsive therapy (ECT).
- ECT is widely accepted as an effective treatment for severe refractory depression, but has a negative social stigma despite its effectiveness.
- This paper has shown ECT remains the most effective treatment of severe refractory depression in adult patients, despite the negative reputation it holds.
- Repetitive Transcranial Magnetic Stimulation (rTMS) will be also be discussed as a possible alternative to established methods of treatment.

Introduction

- Depression is a common and debilitating disorder. It is complicated by a variety of presentations and patient compliance. There are many treatment options available, including pharmacotherapy, cognitive behavioral therapy, and somatic therapy. The purpose of this study is to explore the various treatment options and their effectiveness. Our primary focus will be severe, treatment resistant depression and the options available for treatment.

Statement of the Problem

- There are many interventions available for the treatment of depression. However, treatment of depression can be complicated by many factors including non-compliance, treatment resistant symptoms, negative social perceptions of treatment, and common co-morbidities.

Research Questions

- In adults with depression, where pharmacotherapy or CBT is indicated, which is the better method of treatment?
- In adults with severe, treatment resistant depression, is Electroconvulsive Therapy a better treatment option than medications for management of symptoms?
- In treatment of severe depression with Electroconvulsive Therapy, does the use of concurrent pharmacotherapy and/or cognitive behavioral therapy improve patient outcomes?
- In the treatment of severe, treatment resistant depression, are there safer alternatives to Electroconvulsive Therapy?

Literature Review

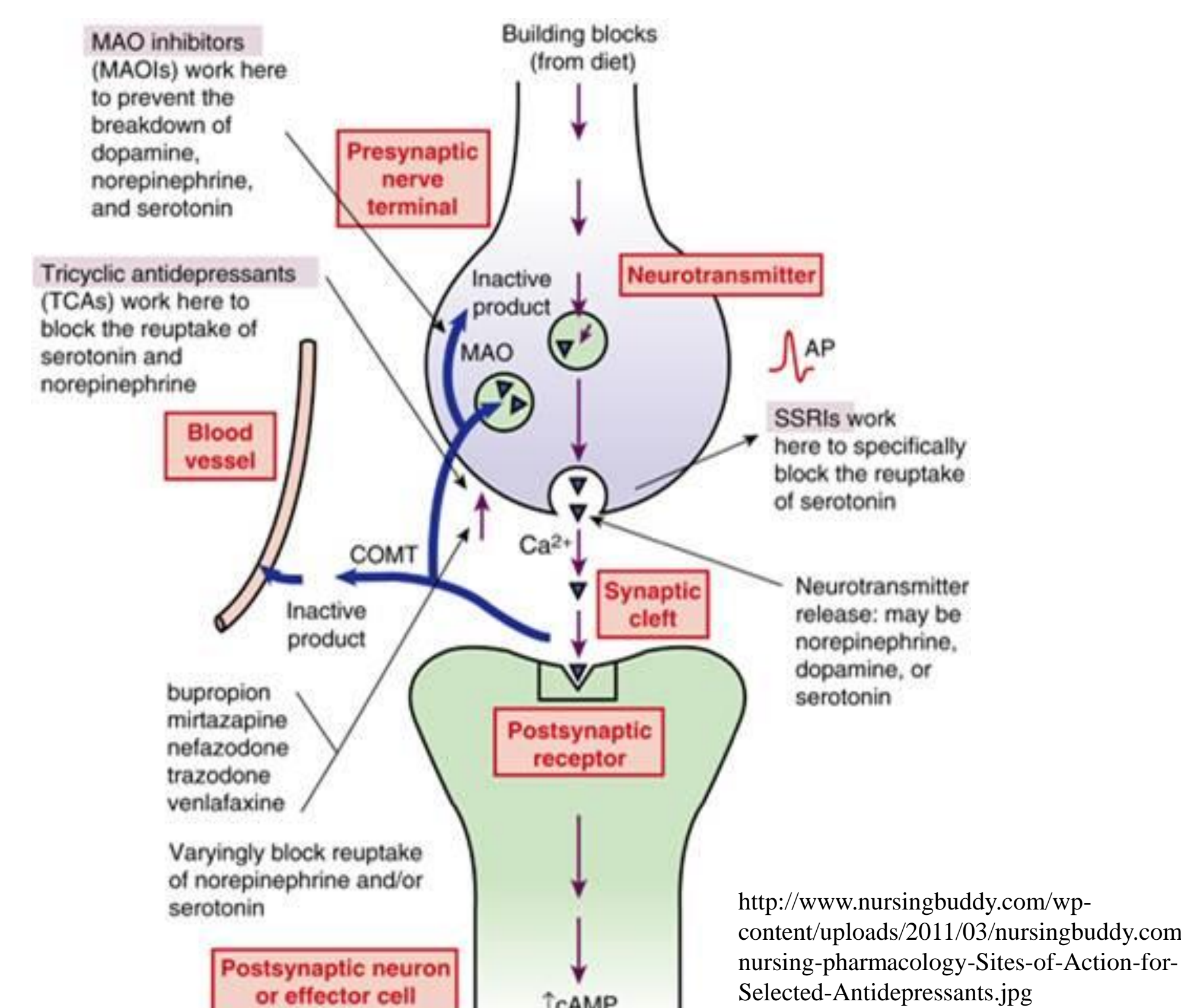
- Occurring when sadness becomes uncontrollable, depression commonly presents with difficulty sleeping and fatigue, decreased appetite, weight loss, decreased interest in personal relationships, and loss of interest in activities thought to be pleasurable (McCance, Huether, Brashers, & Rote, 2010).
- Depression is believed to occur because of a decrease in norepinephrine, dopamine, and/or serotonin levels in the brain. Medications work to correct these imbalances (McCance et al., 2010).
- According to clinical practice guidelines, there is equal efficacy amongst the classes of antidepressants, but not all antidepressants should be used equally or for every patient (Gelenberb et al., 2010).
 - When comparing SSRIs to TCAs, both classes were equally efficacious (BR=1.01; 95% CI: 0.84-1.21; p=0.91), however, SSRIs had fewer adverse effects (OR=0.48; 95% CI: 0.32-0.70; p<0.001) and lower dropout rates (OR=0.41; 95% CI: 0.19-0.86; p=0.02) than TCAs (von Wolff, Holzel, Westphal, Harter, & Kriston, 2013).
- There are better long-term treatment outcomes for patients who received CBT than for patients treated with 6 months of pharmacotherapy.
 - During the time patients were actively receiving therapy, CBT or medication, Hamilton Depression Rating scale (HDRS) scores were similar among the groups (Siddique, Chung, Brown, & Miranda, 2012).
- According to current practice guidelines, ECT is recommended for the treatment of severe, major depressive disorder that is not improved by pharmacotherapy or psychotherapy. (Gelenberb et al., 2010).
 - In one study, prior to treatment with ECT, the sample group had worse scores on all eight scales (p<0.0001) prior to treatment. After treatment, health related quality of life scores were not significantly different between the patients who sustained remission after treatment with ECT and the normal control group (McCall et al., 2013).
- ECT is felt to be the most effective method of treatment for severe, treatment resistant depression. However, using adjunctive pharmacotherapy and CBT should be utilized after remission is achieved. (Brakemeier et al., 2014).
- Repetitive transcranial magnetic stimulation (rTMS) has been studied as an alternative for the treatment of depression. However, studies show mixed treatment plans and results (Gelenberb et al., 2010).
- A systematic review done on rTMS demonstrated a small antidepressant effect when used for treatment of non-refractory depression.
 - The Clinical Global Impressions (CGI) reduction due to rTMS is considered only a minimal reduction when measured on the CGI scale and routine use of rTMS is questionable (Lepping et al., 2014).

Indications For ECT

Depression resistant to pharmacotherapy or psychotherapy
Suicidality
Self-harm
Catatonia
Elderly
Pregnancy
Previous positive response to ECT

Discussion

- Treatment of depression is highly variable based on specific patient presentation.
- **In adults with depression, where pharmacotherapy or CBT is indicated, which is the better method of treatment?**
 - A comparison of CBT versus pharmacotherapy was seen in a study done by Siddique et al. (2012) demonstrating the benefits and drawbacks of both among low-income minority women. This study showed similar results while receiving therapy, but better long-term results in the CBT group while not receiving active treatment.
 - According to current practice guidelines supported by the APA, either pharmacotherapy or CBT are appropriate lines of therapy for mild to moderate depression as first-line therapy. (Gelenberb et al., 2010).
- **In adults with severe, treatment resistant depression, is Electroconvulsive Therapy a better treatment option than medications, for management of symptoms?**
 - According to an article published in the American Journal of Psychiatry, ECT is primarily used in treatment of depression that is resistant to medication therapy. However, initial treatment with ECT should be given primary consideration when there are extenuating circumstances present. In patients with suicidal ideation, failure to have proper oral intake, weight loss, and psychosis with agitation (Kellner et al., 2012).
- **In treatment of severe depression with ECT, does the use of concurrent pharmacotherapy and/or cognitive behavioral therapy improve patient outcomes?**
 - A study published by the Society of Biological Psychiatry evaluated continuing treatment options for patients who responded to treatment with ECT to achieve sustained remission. The results of this study demonstrated the best results with medication and CBT, with significant response sustained twelve months later (Brakemeier et al., 2013).
- **In the treatment of severe, treatment resistant depression, are there safer alternatives to Electroconvulsive Therapy?**
 - According to current practice guidelines, rTMS is FDA approved, but studies have reported mixed results. Given the low side effect profile, it may be considered for use and may have benefit (Gelenberb et al., 2010).
 - When compared with ECT, which has substantial supporting evidence of benefit, the mixed results of rTMS is rather disappointing.



Applicability to Clinical Practice

- For treatment of mild to moderate severity depression, the options are well-studied and clinical practice guidelines should be consulted.
 - Either pharmacotherapy or CBT are reasonable options and should be discussed with each individual patient.
 - Side effect profiles of the medications being considered should determine which medication may be more appropriate for the situation.
- For patients with severe depression or specific indications for use, ECT should be considered.
 - Patients with severe depression with psychosis, catatonia, or need for immediate benefit should necessitate a conversation about ECT.
- An important consideration when deciding on an appropriate treatment method is specific patient presentation and patient preferences.
 - There are so many different presentations on the depression spectrum and so many variables that contribute to severity.

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