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Stephanie Koivisto

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PERMISSION

Title: Selective Serotonin Reuptake Inhibitors versus Cognitive Behavioral Therapy

Department: Nursing

Degree: Master of Science

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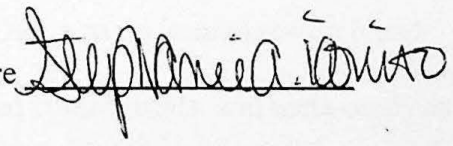
Signature 

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Abstract

Background

Depression is the leading cause of disability worldwide and affects more than 350 million people across all age groups globally (WHO, 2012). Depression is underdiagnosed and undertreated with an outcome that is suboptimal. Depression symptoms can range from loss of interest in pleasurable activities, feelings of hopelessness, sleep disturbances, fatigue, appetite suppression or overeating, feelings of failure, trouble concentrating, and thoughts of harming one's self.

Case Description

Mark is a 55 year male who presented to a healthcare setting for evaluation of acute fatigue symptoms for the past month with increasing symptoms over the past week. He was experiencing a decreased in appetite, insomnia, and loss of interest in pleasurable actives. A Patient Health Questionnaire (PHQ-9) was obtained and was consistent with moderate depression severity.

Literature Review

A literature review was performed using databases from CINAHL and PubMed. Keywords depression, cognitive behavioral therapy, pharmacology, adult and Citalopram were used for review. Data review was within the last five years. Data was on human research and English language. Data source from clinical trials, randomized control trials, and meta-analysis from academic journals was reviewed.

Rating scales are used to identify depression symptoms and severity throughout the literature. Treatment options discussed are monotherapy pharmacological agents, cognitive behavioral therapy, or combination therapy of monotherapy pharmacological and cognitive behavioral therapy. The pros and cons to each therapy treatment are discussed.

Clinical Relevance

Early recognition by examination, diagnosis and treatment can improve outcomes with an ultimate goal of remission of depression symptoms. Depression is a clinical diagnosis and is prevalent in clinical practice. Providers impact adherence to depression therapy through educating, listening to a patient's perspective, and providing effective evidence based treatment for best patient outcomes with a goal of remission of symptoms.

Background

Introduction

Depression is a common and disabling psychiatric disorder affecting millions of lives globally and is predicted to be the leading worldwide disorder by 2030 (Epstein, Szpindel & Katzman, 2014). It is devastating that only 50 percent of people who suffer from depression choose to obtain an intervention for their symptoms and of those, 20 percent receive the comprehensive course of treatment to obtain remission (Epstein et al., 2014). Patients who discontinue antidepressants without a providers consent report adverse side effects, lack of a positive response from the medication or treatment, stigma associated with having a psychiatric illness, or fear of dependence and symptom relief (Cameron et al., 2014).

Rationale

Depression is a treatable disorder and is underdiagnosed and undertreated. Millions of patients suffer with symptoms of depression. The longer symptoms are present, the less likely remission will result. Early recognition of depressive symptoms as well as early diagnosis and management is essential to decrease the prevalence of depression. Depression is a complex disorder of biological, psychological and social factors (Velehorschi, Bleau, Vermani, & Klassen, 2014). Patients need to be educated that there are millions of people who currently suffer with depression. Patients need to know the importance of early treatment and the hope for remission of symptoms.

Purpose

The purpose of this review is treatment of depression from a monotherapy pharmacological approach through selective serotonin reuptake inhibitors versus a non pharmacological approach through cognitive behavior therapy.

Case Report

Subjective

Mark, a 55 year old male, presents to the clinic with complaints of fatigue over a month with an increase in symptoms in the past week. Mark presents by himself and is a good historian. He currently is working at an indoor office and works on a computer around four hours of his shift. He is married and has two grown children who have moved out of the house. He has a strong network of friends. He denies tobacco use, illicit drug use or crisis. He does drink "craft beer of 12-20 ounces once or twice a week." He follows a balanced diet with water intake of eight glasses of eight ounces daily, but has had a decreased appetite in the past month. He has had limited exercise as he has been feeling more fatigued in the past month and "does not feel

like doing much". He has also been having insomnia at night as he "tosses and turns" and is not feeling rested in the am. Mark reports that his wife, who is his bed partner states he does not snore. He was last seen in the clinic this past fall for preoperative clearance for a screening colonoscopy. Past medical history is positive for constipation. Past family history is positive for hypertension and coronary artery disease. Current medications include Metamucil one tablespoon daily and a multivitamin daily. In a review of symptoms, he is positive for fatigue symptoms for the past month. He denies head, ear, nose or throat symptoms. He denies hot or cold intolerance. He denies weight loss or weight gain. He denies hair loss or changes in hair structure or distribution. He is negative for SOB, chest pain or palpitations. His bowel and bladder have been without concern. He denies musculoskeletal symptoms. Mark has an increase in fatigue and "does not feel like doing anything." He denies suicidal or homicidal ideations. Mark contributes his fatigue to not sleeping well and nothing seems to improve his symptoms. He feels more fatigue with less sleep. He has also been less active in the past month with the fatigue symptoms.

Objective

Mark's vital signs are stable. A complete physical exam is unremarkable with the exception of his psych examination. He has a flat affect, slow to respond, makes good eye contact, and well-kempt on presentation. His symptoms of fatigue were rated at a six on a one to ten scale, where one is the least amount of symptoms and ten is the worst amount of symptoms.

Assessment

Administration of a Patient Health Questionnaire (PHQ-9) to Mark was completed in the clinic office. His score was an 11 and is in the moderate depression severity category. Categories

that were indicated on the PHQ-9 were little interest or pleasure in doing things, feeling down, trouble falling asleep, decreased energy, poor appetite, and trouble concentrating on things. He indicated that it was very difficult for him to overcome his symptoms as indicated on the PHQ-9.

Plan

Laboratory blood tests of a complete blood count (CBC), complete metabolic panel (Chem 14), thyroid stimulating hormone (TSH), and a fasting lipid panel was ordered. CBC, Chem 14 and TSH were within defined limits. Fasting lipid panel was cholesterol level of 209, triglyceride 184, HDL 31, LDL 95, cholesterol/HDL ratio 4.72, and VLDL 44.

Treatment of depression was discussed for monotherapy pharmacology versus cognitive behavior therapy. After a discussion, Mark chose a monotherapy pharmacology treatment plan. Selective serotonin reuptake inhibitors (SSRI's) are the cornerstone and first line treatment in an initial diagnosis of depression. SSRI's are the most frequently prescribed class of antidepressants (Epstein et al., 2014; Menchetti et al., 2010). An SSRI, Citalopram 20mg daily was initiated for the safety and efficacy in comparison to other antidepressant drug classes (Woo & Wynne, 2012). Citalopram is indicated to treat depression and anxiety in the adult and geriatric age group (Woo & Wynne, 2012). Many SSRI's need a decrease in dose in the geriatric age group and Citalopram can be continued at 20mg a day (Woo & Wynne, 2012). Sedentary lifestyle was discussed and Mark has agreed to go to the local mall to walk with his wife three times a week to improve his cholesterol, triglyceride levels and depression. Mark will follow up back in the clinic in two to three weeks for evaluation of symptoms management and monitoring of adverse side effects of citalopram. Education was provided on the side effects of citalopram, time lag of three to four weeks for citalopram to have therapeutic effects, and steps to take if depressive symptoms increase. Mark was instructed to call 911 if he experienced any suicidal ideation. Mark

verbalized understanding to education and all questions were answered. He will follow up in the clinic sooner if needed.

Literature Review

A comprehensive literature review was conducted on depression therapy of selective serotonin reuptake inhibitors (SSRI's) and cognitive behavioral therapy (CBT). In accordance with the above case study, Mark was given an option of monotherapy pharmacology of citalopram or CBT. A patient's preference to treatment of depression with antidepressants or psychotherapy should be considered as this process has shown positive clinical significance (Mergi et al., 2011). An important aspect to keep in mind is that therapy selection is individualized and is not a one size fits all model. The longer the depressive symptoms are present, the lower the probability of obtaining remission. A clinical response is having a greater or equal to 50 percent in a symptom reduction score (Cameron, Habert, Anand, & Furtado, 2014). Remission occurs when there is at least three to four weeks of the absence of depression symptoms (Cameron et al., 2014; Hollon et al., 2014). If remission is not achieved it is important to address reasons for ineffectiveness. Reasons include, but are not limited to inaccurate or incomplete diagnosis, co-morbidities, ineffective choice of therapy, ineffective dose of medication, inadequate provision of psychotherapy, pharmacodynamics, or pharmacokinetic factors affecting medication action, short duration of treatment, non-adherence of the patient, persistent side effects, and therapeutic complications (Cameron et al., 2014). Strategies to enhance adherence is patient education, self-management by patients and collaborative care by providers (Cameron et al., 2014). The ultimate goal with any treatment plan is to obtain remission of symptoms and return to the pre-episode level of psychosocial function and quality of life (Epstein et al., 2014).

Rating Scales for Depression

A Patient Health Questionnaire (PHQ-9) is an attractive screening option with brief characteristics and is aligned on DSM-V diagnosis criteria. It is a self-rated scale for ease of patient use (Cameron et al., 2014). The PHQ-9 is a questionnaire of nine questions that uses a scale from 0 indicates no symptoms present to 3 symptoms occur nearly every day and scores range from zero to twenty seven. A PHQ-9 rating score one to four is minimal depression, from five to nine mild depression, from ten to fourteen moderate depression, from fifteen to nineteen moderately severe depression, and twenty to twenty seven severe depression is present (SAMHSA, 1999). Hamilton Depression Rating Scale (HDRS) with a score less than or equal to seven depression is absent, from eight to seventeen mild depression, from eighteen to twenty four moderate depression and a score equal or greater to twenty five severe depression (Menchetti et al., 2010). These two scales were prevalently used in the literature.

Pharmacology Treatment

Antidepressant pharmacology with selective serotonin reuptake inhibitors (SSRI's) is the cornerstone and first line treatment in an initial diagnosis of depression. SSRI's are the most frequently prescribed class of antidepressants (Epstein et al., 2014; Menchetti et al., 2010). Primary care settings mange initial episodes of depression with monotherapy pharmacology antidepressants and dose adjustments are made at six to twelve weeks if appropriate for patients with a goal of remission of symptoms (Epstein et al., 2014). The accepted goal of pharmacology treatment is minimal residual symptoms within the first eight to twelve weeks of treatment (Epstein et al., 2014). A clinical response to treatment is a reduction of at least 50 percent of symptoms and is a clinical benchmark for symptom remission (Epstein et al., 2014). A common factor for residual symptoms is a non therapeutic antidepressant dose or suboptimal duration of

treatment (Epstein et al., 2014). In starting treatment of SSRI's patients need to be aware they can develop cognitive and adverse symptoms of nausea, vomiting, headache, light-headedness, dizziness, dry mouth, increased perspiration, weight gain or loss, and agitation that are not a lack of response to treatment (Epstein et al., 2014; Woo & Wynne, 2012). SSRI's are associated with a safer and more tolerable profile than other antidepressant classes (Cameron et al., 2014; Menchetti et al., 2010). Citalopram and sertraline have the minimal effects on the cytochrome P-450 isoenzyme system and are cost effective (Menchetti et al., 2010). It is important to evaluate the benefits of the SSRI as well as the impact of adverse events (Cameron et al., 2014). Adverse effects of SSRI's can range from nausea, diarrhea, agitation, insomnia, nervousness, and sexual dysfunction (Cameron et al., 2014). Long term side effects of antidepressants include weight gain, sexual dysfunction, sleep disturbances, fatigue, apathy, and cognitive impairment that can impact patient's outcome and therapy adherence (Cameron et al., 2014). Sexual dysfunction rates can exceed 50 percent with SSRI's (Cameron et al., 2014; Ishak et al., 2012). Once a treatment plan has been established patients need to follow up every one to two weeks for symptom management if adverse outcomes are present. Follow up can be decreased to every two to four weeks if response to treatment is effective and adverse outcomes are controlled (Cameron et al., 2014). The American Psychiatric Association (APA) practice guidelines for depression treatment suggests that adequacy of initial treatment response is assessed between four and six weeks of treatment (Fournier et al., 2013). Clinical practice guidelines recommend that minimal duration of depression treatment should be six to twelve months (Cameron et al., 2014). One third of patients discontinue medications within 30 days of initiation of treatment and greater than 40 percent stop treatment within 90 days (Cameron et al., 2014). To increase adherence the provider needs to educate the patient that antidepressants take three to four weeks for a therapeutic effect

to occur, projected length of course treatment needed for remission, common side effects, importance of continuing antidepressant until they are feeling better and discontinuation of antidepressants is done by a provider (Cameron et al, 2014). Patients treated for a first episode of uncomplicated depression and have a satisfactory response to antidepressant medication should receive a full four to nine months of medication to achieve full remission (Cameron et al., 2014). If a relapse occurs the treatment that achieved remission should be restarted (Cameron et al., 2014). Antidepressants used in treatment can produce adverse side effects resulting in nonadherence and morbidity (Velehorschi et al., 2014). A DEPICS study that was conducted in primary care calculated remission rates with SSRI's to range from 52 to 67 percent (Menchetti et al., 2010).

Cognitive Behavior Therapy

Cognitive behavioral therapy (CBT) is a type of psychotherapy that helps patients understand and examine their thoughts, moods, and behaviors resulting in depression. CBT education is taught to replace dysfunctional thoughts and behaviors with more adaptive thoughts and behaviors (Cameron et al., 2014). Evidence from 85 randomized controlled trials (RCTs) shows empirical support for efficacy of CBT in treatment of mild to moderate acute depression (Cameron et al., 2014).. The National Institute for Health and Clinical Evidence (NICE) guideline recommends psychotherapy as a first line treatment (Velehorschi et al., 2014; Menchetti et al., 2010; Cameron et al., 2014). Main components of depression-specific psychotherapies are the alleviation of core symptoms, method delivery of therapy, committed involvement by patient and therapist, symptom monitoring by rating scales, psychological education about depression, and treatment time limited and usually is in place of pharmacological treatment (Cameron et al., 2014). Patients are more likely to continue

antidepressant therapy beyond 30 days if they had psychotherapy or completed greater than 12 years of school (Cameron et al., 2014). Literature supports ongoing supportive, insight-oriented, and time-limited courses of cognitive or interpersonal psychotherapies for improvement in mild to moderate depression (Epstein et al., 2014).

Internet cognitive behavioral therapy (ICBT) is a pragmatic approach for common treatment barriers of limited access to mental health providers, challenge of seeking care, time restrictions, rural or remote residence, mobility barrier, and unwillingness to disclose mental health concerns face-to-face (Hadjistavropoulos et al., 2014). ICBT reviews psychoeducational materials in a variable number of modules over the internet and therapists are available by phone or secure messaging for support (Hadjistavropoulos et al., 2014; Ballegooijen et al., 2014). Research supports the efficacy of ICBT for the treatment of depression (Hadjistavropoulos et al., 2014; Velehorschi et al., 2014). ICBT results have high levels of accessibility, adherence, and satisfaction with comparable treatment outcomes to face-to-face CBT for depression (Hadjistavropoulos et al., 2014; Ballegooijen et al., 2014). It is important to note that patients need to have knowledge with the internet and a tutorial program of the ICBT for best patient outcomes.

Combination Therapy

Adjunct therapy strategies are used to attempt complete remission of symptoms when a partial or incomplete response occurs with monotherapy pharmacology or non-pharmacological approaches (Epstein et al., 2014). CBT is as effective as antidepressant medications alone and with combing the two, response and remission rates increased and ranged from six to thirty three percent (Hollon et al., 2014). There is an increased cost for combined therapy and is reserved for patients suffering from severe depression. The reduction in relapse and higher recovery rates is

linked to patients reduced time in the depressive episode (Hollon et al., 2014). Current guidelines for evidence base practice favor monotherapy for depression therapy over combination therapy (Cameron et al., 2014; Velehorschi et al., 2014).

The literature is clear that monotherapy pharmacology versus CBT can be interchangeably effective for treating depression symptoms. Monotherapy pharmacology is more recognized as a first line treatment at this time in literature, although CBT has shown effectiveness towards remission. An important aspect is giving patients a choice on a treatment plan if able, as this has shown an increase in clinical significance. Combination therapy is effective for depression treatment, but is reserved for severe depression related to cost factor. There are risks and benefits with each treatment plan. The treatment plan that is best for patient's interest should be the one chosen.

Learning Points

As evidenced in the literature, the most important aspect to depression remission is early recognition, diagnosis, and treatment. Once depression is diagnosed, this is far from the end point. Continuous education, follow up and evaluation is essential to achieve the goal of remission.

An individualized plan of care for treatment is essential for each patient as each diagnosis of depression is unique. Follow up and evaluation of data is needed for efficacy of the plan of care.

Depression is a healthcare epidemic that is projected to be leading cause of disability globally by the year 2030 (Epstein et al., 2014). This statistic is devastating and gives a great indication that early depression recognition and treatment is essential to address. Without

remission in depression an increase in morbidity and mortality occurs and results in chronic disease. Depression remission increases the quality of life and holistic well-being of patients.

Evidence based guidelines are an essential guide to best patient outcomes and remission rates. Screening for depression in the clinical setting with routine visits can recognize early depressive symptoms and early diagnosis.

Health care providers have the best interest of the patient at heart. Patient's should be well educated on depression disorder and have input on the plan of care for remission. Patients who feel in control of their health are more prone to positive patient outcomes. It may not always be applicable for patients to choose their treatment plan, but when the opportunity arises give them the reins.

References

Ballegooijen, W.V., Cuijpers, P., Straten, A.V., Karyotaki, E., Anderson, G., Smit, J.H., & Riper, H. (2014). Adherence to internet-based and face-to-face cognitive behavioural therapy for depression: A meta-analysis. *Plos One 9(7),* 1-11.

Cameron, C., Habert, J., Anand, L., & Furtado, M. (2014). Optimizing the management of depression: Primary care experience. *Psychiatry Research 220(S1),* S45-S57.

Epstein, I., Szpindel, I., & Katzman, M. (2014). Pharmacological approaches to manage persistent symptoms of major depressive disorder: Rationale and therapeutic strategies. *Psychiatry Research 220(S1),* S15-S33.

Fournier, J.C., DeRubeis, R.J., Hollon, S.D., Gallop, R., Shelton, R.C., & Amsterdam, J.D. (2013). Differential changes in specific depressive symptoms during antidepressant medication or cognitive therapy. *Behavior Research and Therapy 51,* 392-398.

Hadjistavropoulos, H.D., Pugh, N.E., Nugent, M.M., Hesser, H., Andersson, G., Ivanov, M., … Austin, D.W. (2014). Therapist-assisted internet-delivered cognitive behavior therapy for depression and anxiety: Translating evidence into clinical practice. *Journal of Anxiety Disorders 28*, 884-893.

Hollon, S.D., DeRubeis, R.J., Fawcett, J., Amsterdam, J.D., Shelton, R.C., Zajecka, J.,… Gallop, R. (2014). Effect of cognitive therapy with antidepressant medications vs antidepressants alone on the rate of recovery in major depressive disorder. *Cognitive Therapy in Depression Recovery 71(10),* 1157-1164.

Ishak, W.W., Christensen, S., Sayer, G., Ha, K., Li, N., Miller, J.,... Cohen, R.M. (2013). Sexual satisfaction and quality of life in major depressive disorder before and after treatment with citalopram in the STAR*D study. *J Clin Psychiatry 74(3),* 256-261.

Menchetti, M., Bortolotti, B., Rucci, P., Scocco, P., Bombi, A., & Berardi, D. (2010). Depression in primary care: Interpersonal counseling vs selective serotonin reuptake inhibitors. The DEPICS study. A multicenter randomized controlled trial. Rationale and design. *BMC Psychiatry 10(97),* 1-9.

Mergl, R., Henkel, V., Allgaier, A.K., Kramer, D., Hautzinger, M., Kohnen, R.,...& Hegerl, U. (2011). Are treatment preferences relevant in response to serotonergic antidepressants and cognitive-behavioral therapy in depressed primary care patients? Results from a randomized controlled trial including a patient's choice arm. *Psychotherapy and Psychosomatics 80,* 39-47.

SAMHSA. (1999). Patient Health Questionnaire (PHQ-9). Retrieved from http://www.integration.samhsa.gov/images/res/PHQ%20-%20Questions.pdf

Velehorschi, C., Bleau, P., Vermani, M., Furtado, M., & Klassen, L.J. (2014). Understanding the role of adjunctive nonpharmacological therapies in management of the multiple pathways to depression. *Psychiatry Research 220(S1),* S34-S44.

Woo, T., & Wynne, A. (2012). Pharmacotherapies for Nurse Practitioner Prescribers (3rd Ed.). Philadelphia: F.A. Davis Company.

World Health Organization. (2012). Depression. Retrieved from http://www.who.int/mediacentre/factsheets/fs369/en/