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Treatment Of Depression In HIV Positive Patients.

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ABSTRACT

Nearly 121 million people with HIV/AIDs suffer from depression globally. One has to suspect depression in HIV positive patients shows less interest and indifference to surroundings. Diagnosis of depression in such individuals is difficult one as signs and symptoms of depression may be similar to signs and symptoms of progression of the disease. Both psychological and biological factors can cause depression in HIV positive patients. The depression can lead to poor outcome of therapy of HIV patients. SSRIs are the main group of drugs used to manage depression in HIV positive patients because of they are better tolerated than other groups. The possible drug interaction between antidepressants and antiretroviral drugs to be borne in mind while treating depression in AIDs patients.

Keywords: Depression, Human immunodeficiency virus, Acquired immunodeficiency syndrome

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INTRODUCTION

Human immunodeficiency virus or acquired immunodeficiency syndrome remains one of the world's most significant public health challenges, particularly in developing countries. Advances in antiretroviral therapy (ART) and availability of antiretroviral drug has led to longer longevity of AIDs patients. This has led to reduction in onward transmission of HIV. An estimated 20.9 million people were receiving HIV treatment in 2017. Only fifty-nine percent of all people living with HIV in 2017 were receiving ART[1].

Depression is a psychiatric condition characterized by emotional, physical and behavioral symptoms. The patient may feel sad, have low self-esteem, and find difficulty in carrying out his /her routine work. If the conditions continues for long it may result in severe suffering, and may hinder the work output/business and finally the person may land up in clinical depression. When someone feels unhappy, down, blue, sad, or hopeless then they think that they are depressed. Each person experiences emotions and if one has HIV disease the chances of emotions are even high. If these symptoms persist or worsen, one may have to undergo psychological evaluation and treatment. Early intervention will reduce sufferings and improve the quality of life.

Majority of people with chronic medical diseases, suffer from depression[2–6] and HIV is no exception[7]. Twenty to thirty percent of HIV-infected patients have depression or depressive symptoms[8]. Depression in HIV patients adds to the suffering and may result in poor compliance to medication; and also interferes with self-care skills and increase the chances of morbidity and mortality [9,10] . Depression can adversely influence the mental status of HIV positive patients and it often goes undiagnosed and untreated. In spite of all these effects of depression on HIV patients, one need not worry too much because of advancement in the treatment of HIV as well as depression; these patients can live fuller and more productive lives.

SIGNS AND SYMPTOMS

There is great variation in signs and symptoms of depression from person to person. Clinicians carefully looks for signs and symptoms of depression and suspect depression if patients report feeling blue or having very little interest in daily activities. Along with these feelings if patients have symptoms such as fatigue, sluggish and slow, difficulty in concentration, loss of interest in sex, insomnia, loss of appetite or weight loss or overeating, most likely that they are depressed.

DIAGNOSIS

It is really a challenge to diagnose depression in an HIV infected individual. Patient may not be willing to discuss their mood and emotions with the clinician for the fear of being stigmatized further[11]. Clinicians find it difficult to diagnose as the symptoms of depression such as inability to sleep, reduction in body weight, fatigue, early morning awakening etc. may be considered as part of HIV disease itself and they may not make a separate diagnosis of depression. It is very important to diagnose major depression in HIV/AIDS patients because the response to treatment in HIV/AIDS patient is as good as in an uninfected population and when not recognized it has negative impact on adherence with medical treatments, quality of life and overall outcome of the patients[12]. To overcome this problem, it is recommended that clinicians should allow the patient to express their emotions in clinics [11]. If health care providers are dealing with these patients, they need extra skill in the assessment of psychiatric syndrome in HIV patients. Various tools are available for the diagnosis of depression. It is reported that in otherwise asymptomatic HIV infected patients' symptoms such as insomnia, early morning awakening and fatigue are related to psychological disturbance possibly a major deprssion[13]. Only about half of HIV infected patients with depression are being treated with antidepressants, the reason being most of such patients are not diagnosed at an early stage of disease[13].

ETIOLOGY OF DEPRESSION IN HIV PATIENTS

Researchers have identified many factors that can cause depression in an HIV infected patient. They can be broadly grouped in to either psychosocial or biological factors. It is not uncommon that soon after diagnosis of depression there patients experience more stress than before. The humiliation patient undergo with HIV/AIDS has been identified as an important issue and it is common to find frequently with HIV/AIDS and is correlated with psychiatric disorders such as depression, anxiety, etc [14,15,16,17]. Another factor is a biological mechanism that is responsible for of depression in an HIV positive patient[18]. HIV patients may have high level of

cytokines. This is probably because of activation of astrocytes and microglia, which in turn reduce the monoaminergic (mainly dopaminergic) function and cause neurotoxicity. These viral pathways interact with psychosocial factors to create the depressive state [19]. It is also reported that treatment with antiviral drugs may cause depression[20].

Effect of depression on HIV infection

There are some reports that says that there is no relation between depression and of HIV infection progression whereas few others say that the depression can lead to poor outcome of HIV infection [21,22,23,24]. The reason for the later may due to poor compliance to therapy and self-care as well as stress induced immunodeficiency. This is evident by a decrease in natural killer cell count and B-lymphocytes cell count at low viral load[11]. An increase in norepinephrine activity that is observed in depressive patients may cause increase in cortisol level and HIV replication and may lead to a faster progression of HIV infection to AIDS [23,25].

MANAGEMENT

It is vital to treat depression in HIV infected individuals for the reasons mentioned above. Pharmacotherapy, psychotherapy and different kinds of exercises are used to treat depression in HIV positive patients. Drugs, which increase the level of 5-hydroxytryptamine (serotonin) namely selective Serotonin Reuptake Inhibitors (SSRIs), are the most widely used drugs to treat depression in HIV infected individual although they are slightly less effective than Tricyclic Antidepressant (TCA) for the reason that they are better tolerated[26]. Symptoms of depression were reduced significantly by all SSRIs. There are not enough data available that compares various SSRIs and their interactions with antiretroviral drugs. However available data suggests that sertraline, citalopram, and escitalopram are preferred agents[27,28]. The TCAs are more efficacious than SSRIs but are associated with significantly more side effects; hence, TCAs should be used cautiously in this population[29]. Nefazodone is newer antidepressant that is useful in these patients, but it has to be used with care because fear the of development of viral hepatitis[30]. Another newer antidepressant namely Mirtazapine is an effective alternative and has additional benefit of reduced gastrointestinal side effects. Further, it causes weight gain and can be more suitable for depression with HIV wasting disease[31]. Venlafaxine and reboxetine are other alternatives available to treat these patients. Venlafaxine has least interaction with CYP450 enzymes, thus less chances of interaction with antiretroviral drugs; and reboxetine is well-tolerated HIV patients [32]. Dehydroepiandrosterone is effective in management of long standing minor depression in HIV positive patients. Studies have shown it to be better than placebo in reducing symptoms of depression. Further, the study revealed that the attrition rate is low in the group of physically ill patients and there were request for open label therapy displaying high acceptance of medication[33].

Other than the pharmacotherapy, various psychotherapies, aerobic and resistance exercises are effective in treating HIV positive patients with depression. However, data on which type non-pharmacological intervention is most effective in treating HIV positive patients with depression is not yet available[34].

CONCLUSIONS

A high percentage (up to 72%) of HIV positive patients suffer from depression, but only two third of such patients receive antidepressant therapy. Depression in HIV patients contributes to significant morbidity probably due to poor patient compliance and various other factors. It is very important to diagnose depression in such patients and treat them early so that they will have better quality of life. Both pharmacological and non-pharmacological treatment are available. SSRI are safer and better tolerated than TCAs. There is lack of data on comparative efficacy of various SSRIs, but sertraline, citalopram, and escitalopram are the better options based on the available data.

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