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Delirium and Depression in Advanced Cancer: Forensic Aspects

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ABSTRACT

Background: Delirium and depression in people with cancer is important because of its relatively high prevalence, poor prognosis if undetected and the impact on the quality of life. Considering its importance, we have made this review article to know surprisingly little about the frequency of poor outcomes, or the factors which might predict poor outcomes. Often misdiagnosed by clinicians as a psychiatric disorder and the underlying cause is not focused on. The experience of delirium causes distress to patient and their care givers and has obvious implications for quality of life for both. Under diagnosis of delirium have serious implications as delirium may be a marker of potentially reversible pathology. Apart from being a cause of poor outcome, the delirium state may lead to difficulties with treatment, rehabilitation and interfere with activities of daily living. The presence of major depressive disorder should result in an automatic finding of incompetence. Psychiatrists with ethical objections to assisted suicide advocate a higher threshold for competence and more extensive review of a decision. The ethical views of psychiatrists may influence their clinical opinions regarding patient competence to consent to assisted suicide. The extensive evaluation of these terminally ill cancer patients is thus recommended by forensic psychiatrists.

Key words: Psychiatric disorder, Cancer patient, Forensic psychhiatry, Delirium & depression

INTRODUCTION

What is delirium?

Delirium has been recognized since antiquity and historical reference abound, starting notably with the writing of Hippocrates and celsus. Though recognized since ancient times, there has been a lack of consensus about the core features of the syndrome, leading to a general lack of progress in the area. Delirium is delivered from the latin word deliro (to be crazy). Recent international attempts at developing reliable diagnostic criteria have improved the situation, so that currently there is consensus that delirium is an acute syndrome in which a potentially

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reversible cerebral dysfunction manifests as disturbance in the levels of consciousness, attention memory and orientation, with concomitant abnormalities of thinking, perception, psychomotor activity, sleep wake cycle and emotions. In this definition, the acute nature of onset the multiplicity of signs, symptoms and the presence of the demonstrable casual cerebral abnormality are worth focusing on. There is consensus that the state of the delirium is usually transient and fluctuates in intensity. Most of such episodes said to last from a few days to few weeks and progression beyond six months is thought to be rare. Delirium is also known as ICU Psychosis, acute confusional state, acute brain failure, encephalitis, encephalopathy, paraneoplastic limbic encephalitis, organic brain syndrome.

WHAT IS LIKELY TO DEVELOP DELIRIUM?

Historically, delirium has been associated with fevers, poisons and disease. More recently, delirium has been known to occur with extremes of age, acute and server systemic disturbance such as infection with high grade fever, cerebral disease, metabolic abnormalities, surgical operations and trauma. Generally it is known that delirium occurs more in elderly age and when multiple aetiological factors are involved such as wide spread disease involving different body systems, effects of treatment such as chemotherapy and radiotherapy and when there is drug and alcohol abuse. Other predisposing factors are vision impairment, polypharmacy, COPD, Preoperative use of Benzodiazepines. Preexisting dementia also makes the development of delirium more likely and frequently delirium goes unrecognized.

WHAT IS IT IMPORTANT?

Delirium in people with cancer is important because of its relatively high prevalence, poor prognosis if undetected and the impact on the quality of life. Considering its importance, we know surprisingly little about the frequency of poor outcomes, or the factors which might predict poor outcomes. Often misdiagnosed by clinicians as a psychiatric disorder and the underlying cause is not focused on. The experience of delirium causes distress to patient and their care givers and has obvious implications for quality of life for both. Under diagnosis of delirium have serious implications as delirium may be a marker of potentially reversible pathology. Apart from being a cause of poor outcome, the delirium state may lead to difficulties with treatment, rehabilitation and interfere with activities of daily living.

WHAT CAUSES DELIRIUM?

Based on the activity level, delirium has been classified into hyperactive and mixed. Clinicians may fail to recognize the hypoactive and mixed types, as the usual stereotype is of the overactive, confused, often hallucinating and agitated. Various theories have been proposed to explain the aetiology of delirium. The prefrontal cortex and sub cortical areas of the brain have been reported to be affected. We know that abnormal cerebral functioning leads to delirium but the exact pathophysiology remains obscure. Altered neurotransmission, changes in cerebral oxygenation and blood flow have been proposed to a number of individual factors such as hypercalcemia have been studied. Reduced cholingeric, dopaminergic non-epinephrine function and elevated cytokines changes endothelial permiability and result in delirium. Some of the common causes of delirium in cancer are - Brain involvement of cancer either primary or secondary, organ failure, electrolyte imbalance, treatment side effects from chemotherapy, radiotherapy and narcotic analgesics, infections, nutritional deficiencies and hematological abnormalities.

DELIRIUM IN CANCER PATIENTS AND FORENSIC PSYCHIATRY

Malignancy of any kind in its terminal stages is

one important area to be considered when dealing with a delirious patient. It is this altered state of mind that forms the basis of a medical defence. Offending in a state of delirium is indeed very rare. The appropriate disposal depends on the clinical need. What defence was adopted depends on the situation. It might be appropriate to plead not guilty because of lack of intent, or to ask for a hospital order or some other form of treatment on the grounds of mental illness. In some of the very serious cases, insanity can also be pleaded under the McNaughten Rules. A person in delirious state needs to be evaluated thoroughly for the competency to stand a trial. Charges are dropped in a majority of the cases in which an evaluator considers a defendant incompetent, most frequently in cases involving misdemeanor charges and/or the clinician considers it unlikely that the defendant could be restored to competence.

Lucid Interval

This is a period occurring in insanity during which all the symptoms of insanity disappear completely. During this period the patient will be held responsible for his criminal acts.

MANAGEMENT OF DELIRIUM

The management of delirium consists of treatment of the causes, where possible symptomatic treatment of the mental state to be given. All attempts should be made to identify the cause and to reverse it. Some time correction of simple problems such as constipation and urinary tract infection can lead to dramatic changes in the mental state. However, far too often, it is not so straight forward particularly if the patients are in advanced stage of cancer. There is also a reluctance to subject, patients to investigate when they are considered to be in a "terminal" stage. A careful balance has to be struck between ruling out treatable causes and subjecting people to painful procedures particularly when they are confused. However, it is important to remember that the experience of delirium can be terrifying and all efforts must be made to reverse it in order to help people to have the best quality of life.

Symptomatic management consist of using medications to alter the mental state and applying attention to the environmental factors to help in confusion. The most commonly used medication is Haloperidol. In general starting doses are low and are gradually titrated against side effects until the desired changes in mental state are achieved. Newer antipsychotics may eventually replace Haloperidol as the drug of choice as their side effects profiles are milder. Antipsychoptics are normally of help in dealing with agitation and psychotic symptoms such as delusion and hallucinations. For the hypoactive type of delirium, stimulants have been suggested but, studies are only beginning to be done in this area. The benzodiazepines are probably best avoided and if used should be short term and withdrawn immediately if there is a paradoxical increase in confusion and agitation. Parental lorazepam may be of use for same patient, especially when combined with Haloperidol.

DEPRESSION

Patients who are diagnosed as having cancer react with significant levels of stress. When the stress related to the diagnosis and treatment of cancer is severe or when patients emotional resources are insufficient to cope up with stress, psychological distress may result. This psychological distress may ultimately lead to anxiety, depression, even suicidal ideas.

PREVALENCE OF DEPRESSION

The prevalence of depression in the general population has been estimated to be six percent (Hock& Reigar 1985). The frequency of depression among cancer patients has been the subject of numerous studies and reported rates have raised from as high as 50% to as low as 4.5%. In the past depression was thought to be grater in patients with cancer than those with other illnesses. However Plumb & Holland (1977) feel that cancer

patients may not be more depressed than other equally ill medical patients.

VULNERABILITY TO DEPRESSION

The factors that increase the risk of depression are history of affective disorder or alcoholism, advanced stage cancer, increased physical impairment, poorly controlled pain and treatment with medications that produced depression symptoms. Numerous commonly prescribe medications can produce symptoms of depression e.g. alpha-methyldopa, reserpine, barbiturates, diazepam, steroids and propranolol. Some of the cancer chemotherapeutic agents also cause depression e.g., vincristine, vinblastine, procarbazine, L-aspariginase and interferon. Many metabolite nutritional, endocrine and neurological disorder produce symptoms that can be mistaken for depression. Cancer patients with abnormal levels of sodium, potassium and calcium may appear. Patients who are febrile, anaemic or deficient in vitamin B and folic acid may also appear depressed. Hyper-or hypothyroidism, Cushing syndrome, hyper parathyroidism and adrenal insufficiency must be considered in the differential diagnosis of depressed cancer patients. If the above are present, appropriate treatment should be given. Depression is also a common sequelae of chronic pain syndromes. Adequate pain control must be established before a diagnosis of major depressive disorder established.

DEPRESSION IN CANCER PATIENTS AND FORENSIC PSYCHIATRY

Severe depression may be mistaken for an irreversible dementia or a malignancy. Depression can lead directly to offending. A number of offences may be committed in the depressive state like homicide, infanticide, theft, sexual offences, alcoholism and offending, etc. The violent act may arise form the irritability associated with the disturbed affective state. Depression may have a disinhibiting effect undermining the subject's normal self-control. The disinhibiting combination of alcohol and depression may also lead to offending. The forensic psychiatrist is called on to evaluate the role of depression in terms of capacity to stand a trial or for its influence on other aspects of a legal situation. The major depressive disorder is a ground for a psychiatric defence and should lead to a psychiatric recommendation.

There are a number of legal and ethical considerations that mental health professionals will want to consider when being involved with people who are considering end-of-life care options and making end-of-life decisions, especially in terminally ill cancer patients.

The presence of major depressive disorder should result in an automatic finding of incompetence. Psychiatrists with ethical objections to assisted suicide advocate a higher threshold for competence and more extensive review of a decision. The ethical views of psychiatrists may influence their clinical opinions regarding patient competence to consent to assisted suicide. The extensive evaluation of these terminally ill cancer patients is thus recommended by forensic psychiatrists.

MANAGEMENT OF DEPRESSION

The cornerstone of good management of depressed cancer patients is the consistent emotional support given by the psychologist. The scale given by the Hamilton is the most popularly used scale to measure the depression and anxiety. Pre-treatment application of the scale is necessary to know the benefit resulting from the actual treatment. When depressive symptoms lasts longer than a week, when they start worsening rather than improving and when they interfere with the patient's ability to co-operate with treatment, a proper treatment of depression becomes necessary.

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