Agitation in the medically ill elderly

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Summary

Agitation is a common and significant problem in the medically ill elderly. It is responsible for diminished quality of life for not only the patient, but the caregivers as well as the patient's relatives. This paper will illustrate the concept of agitation and different modes of classification. The major emphasis will be placed on discussing prompt, correct diagnosis of the underlying cause of agitation and effective treatment of both the cause of agitation and the symptoms of agitation itself.

Key-words: ***Elderly, Agitation, Confusion, Mood stabilizer, Antipsychotics, Antidepressant.***

Résumé

Agitation est un problème très courant et important chez les vieux qui sont malade médicalement. Elle est attribuable pour la qualité de vie affaiblie pour non seulement le patients, mais aussi les pourvoyeurs des soins en plus les familles du patient. Cet article est pour but d'illustrer le concept de l'agitation et les méthodes de classification diverses. L'insistance principale sera basée sur la discussion précoce, diagnostic correct des causes sousjacent d'agitation et meme les symptoms d'agitation les deux.

Introduction

Agitation is a very common occurrence among those over the age of 65.

The prevalence of agitation depends on the definition being used, However, most studies report the prevalence of some form of agitation at approximately 66 percent[1]. Agitation is defined as inappropriate verbal, vocal, or motor activity which is not explained by ordinary confusion alone[2]. Other characteristics of agitation include association with strong emotions, anxiety, tension, urgency, fear, lack of control, and forceful tumultuous feelings. Agitation may also be accompanied by aimless wandering, pacing, constant screaming, and arguing[3]. Other manifestations of agitation include the individual talking incessantly or disrobing inappropriately. It may reflect a functional or organic psychiatric disorder or a host of medical and non-medical etiologies[4]. If not treated, agitation may progress to aggressive behavior. It is important to identify and treat agitation because it may be a manifestation of a more serious underlying condition. This is of significance among the elderly as they are more prone to being medically ill. Secondly, it may decrease the sense of well-being of the individual suffering from it. Thirdly, it may affect quality of life and increase the likelihood of being placed in a long term care facility. Furthermore, it may interfere with medical and nursing assessment and care, as well as trigger a broad range of emotional reactions in caregivers (i.e. puzzlement, compassion, frustration, irritation, and fear). Treatment of agitation is therefore imperative in order to prevent potential danger to patients and caregivers as well as to prevent excessive use of physical restraints and psychotropic medications.

Classification of agitation

Agitation has been classified in several ways. Most commonly, it is classified as either mild or severe. Mild agitation consists of behavior that is somewhat destructive to others, but is non-aggressive and poses no risk of harm to the individual, caregiver, or others. Examples include moaning, crying, arguing, pacing, asking repetitive questions, having repetitive movements, or wandering aimlessly. Severe agitation consists of aggressive, disruptive behavior that may endanger the physical wellbeing of the patient and those around him. Examples include the patient attempting to leave his or her environment, throwing objects at others, grabbing or scratching at himself or others, head banging, or any self injurious behavior. Hussian[5] described three categories for agitation including behavioral excesses such as shouting rather than talking; problems of stimulus control which is behavior that occurs out of context such as undressing in public; and self-stimulatory behavior such as picking at skin or rubbing the palm over parts of the body. Hussein[6] also classified agitation based on wandering around. He described exit seekers (those that wander away from their dwelling), akathisiacs (restless and aimless movers), self stimulators (those who touch objects or themselves) and modelers (those who follow others around). Zimmer et al[7] classified agitation on the basis of its impact on others. They describe behavior endangering self such as scratching, disturbing others such as verbal abuse and hoarding food or other materials, and endangering others such as physical aggression. Perhaps one of the most acknowledged classification systems of agitation was put forth by Cohen-Mansfield .

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Table 1 Causes of agitation

Delirium secondary to drug interaction or other major medical illness
Dementia (Alzheimer's type, vascular, Lewy body)
Drug intoxication/interaction
Medication side effects
Depression
Anxiety
Psychosis
Pain
Sleeplessness
Environmental isolation/Self isolation
Sensory impairment

This classification includes physically aggressive behavior such as hitting or kicking, physically non-aggressive behavior such as pacing or disrobing, and verbally agitated behavior such as constant repetition, complaining, and cursing[3].

Causes of agitation

Agitation in the elderly (and the medically ill elderly) can be caused by a variety of factors including both medical and non-medical causes. The most common causes of agitation include delirium, dementia, and acute psychosis[8]. Factors, which contribute to delirium, include the misuse and side effects of prescription interactions and central nervous system toxicity.

Other causes of delirium include systemic disturbances such as electrolyte imbalance, congestive heart failure, decreased central nervous system blood flow such as secondary to orthostatic hypotension, chronic obstructive pulmonary disease, hypothyroidism, diabetes mellitus, respiratory infection, cerebral-vascular accident, occult head trauma, prolonged constipation, alcohol intoxication or withdrawal, and pain or discomfort[8]. In addition to acute psychosis, other non-medical causes of agitation include depression, anxiety, insomnia, sensory impairment, communication difficulties, environmental isolation, or over stimulation[8]. For most individuals agitation is caused by multiple factors.

Assessment of agitation

In order to quantify the degree of agitation and to assess response to interventions, there should be objective ways of assessing agitation. This can be done in the following ways. The first method is by direct observation which may involve video or audio recording. It focuses on observing the individual for a specified amount of time in their own environment. It is advantageous in that it provides an objective means to determine whether or not agitation is present as well as monitor response to intervention. The main disadvantage is that it may be expensive and time consuming. The second type of assessment involves caregiver ratings in which caregivers are given questionnaires to complete. The questionnaire provides a means with which to rate the behavior of the patient over time. It is easily done and inexpensive; however, its reliability is dependent on the caregivers' bias. Examples of caregiver ratings include the Cohen-Mansfield agitation inventory[9] and the agitated behavior scale[10]. The third method of assessing agitation is through the use of advanced technological devices. Here, instruments that record the behavior of patients under study are attached or in close proximity to the patient. This method is very reliable and free from caregiver bias. However, it is expensive. Further assessment must include a detailed history with collateral information, physical examination, and mental status examination. The mini-mental status examination is useful by providing a great deal of information with relatively few questions. Routine laboratory tests including urinalysis, complete blood count, BUN, serum glucose and electrolytes are mandatory. Individual patients may also require thyroid function tests, B12 and folate levels, urine culture, ECG, chest x-ray, CT or MRI of the brain, or a drug or alcohol screen. Serum drug levels should be obtained if the patient is taking any medication associated with toxicity, i.e. digoxin, anticonvulsants, theophyline, tricyclic antidepressants, or lithium.

Table 2 Assessment of agitation

Direct observation
Caregiver rating scale questionnaire
Advanced technological devices
Detailed history and physical
MSE/MMSE
Laboratory data

Treatment

Treatment for agitation includes the use of medications as well as environmental interventions. For many cases of mild agitation, environmental interventions alone may be sufficient. These include structuring the environment through the use of a night light in the bedroom, providing a predictable routine, providing orienting stimuli such as a clock or calendar, separating disruptive, noisy patients from each other and using bright daytime lighting. This may also involve controlling door access and using safety latches. Behavioral interventions include reducing isolation of the patient, frequent talking with the patient, identifying and avoiding specific precipitants of agitation, altering the patient's schedule, and providing verbal reassurance and comforting. Occasionally, allowing the patient to pace may be effective. Encouraging recreation, pets, and the use of art may also be therapeutic. In cases of severe agitation, medication is almost always required in addition to the above environmental interventions. Rarely, in severe instances the use of physical restraints may be necessary.

Pharmacotherapy

The use of medications is sometimes unavoidable in severe agitation. There are some specific medications that are effective in certain clinical conditions. If the agitation is secondary to delirium, the medical cause of the delirium should be determined and treated. However, symptomatic treatment of the delirium may be achieved with the use of antipsychotic medications. Atypical antipsychotic medications are preferred due to their more favorable side effect profile[11], however, since treatment is short term, conventional antipsychotic medications may be used if atypical antipsychotics are ineffective. When agitation is secondary to psychosis, such as occurs in schizophrenia, bipolar disorder, or dementia, atypical antipsychotic medication should be first line in order to limit troublesome side effects since treatment is presumed to be long term. Atypical antipsychotic medications such as quietapine, olanzapine, and risperidone are noted to be associated with less extrapyramidal side effects (EPSE) and are less likely to cause tardive dyskinesia (TD) with long term use compared with conventional antipsychotics such as haloperidol and thioridazine[12]. In addition, there is minimal to no prolactin elevation and improvement in cognitive function[13,14] compared to conventional antipsychotics. There is also evidence that atypical medications may have antidepressant actions and efficacy in treating the negative symptoms of schizophrenia[14]. Conventional antipsychotic medications may be used when parenteral administration is required and are preferred in the treatment of agitations associated with dopaminergic agonist treatment of Parkinson 's disease. Depression is a common cause of agitation. Unfortunately, depression may be difficult to diagnose when there are symptoms resembling that of a general medical condition. When depression is mild to moderate, antidepressant medications with or without psychotherapy are often sufficient. If the depression is severe with or without psychotic symptoms, electroconvulsive therapy (ECT) or antipsychotic medications may be required. When treating agitation associated with an anxiety disorder, buspirone, trazodone, selective serotonin reuptake inhibitors (SSRIs) and atypical antipsychotics are all effective. Buspirone and SSRIs are noted to have a slow onset of action (2 weeks or greater), therefore benzodiazepines may be used with caution during this period. Sundowning, a common phenomenon in dementia, which consists of agitation, confusion, and disorientation during the late afternoon and worsening throughout the evening may be effectively treated with atypical antipsychotics or trazodone. Benzodiazapines and antihistamines are contraindicated in the treatment of sundowning because they further increase the disorientation and confusion. Other causes of agitation include medication side effects. Antipsychotics, trazodone, sodium valproate, as well as any class of antidepressant medication may all cause agitation as an adverse effect.

In these cases, the medication should be discontinued, and a more suitable one instituted. Finding the appropriate fit between patient and medication is often achieved by trial and error. It is imperative to avoid polypharmacy since the mediations used to treat agitation can often worsen it, especially in the elderly. It is however, prudent to augment treatment when a partial response is achieved. If there is no response at all, the medication should be switched after an appropriate period of time. It is acceptable to switch or augment atypical antipsychotics, sodium valproate, buspirone, or antidepressants after two weeks of therapy. When using combination therapy, the rule is to start low and go slow. For example, start with an atypical antipsychotic and add sodium valproate or trazodone. Benzodiazapines may be used PRN in a judicious manner. Depending on the etiology of the agitation, one may consider discontinuing treatment after two to three months for mild cases of agitation and eight to nine months in more severe cases of agitation. Any relapse suggests the need for continued treatment. Tapering should be done slowly, e.g. at a reduction rate of 25% every week. Medication safety is extremely pertinent in the elderly patient who is often on multiple medications, thus increasing the likelihood of drug interactions. In addition, the elderly are more vulnerable to adverse drug reactions. Dosing may also be different from the general population because the elderly patient metabolizes medications more slowly. As a general rule one should carefully review the patient's list of medications before introducing any psychiatric medication.

Conclusion

Agitation is any extremely common phenomenon among the elderly population, especially those living in an institutional setting. Common causes of agitation in the elderly include dementia, delirium, and depression. Agitation and its cause should be treated in order to ensure resolution of symptoms and improve the quality of life of the patient and his or her caregivers. It is best to begin with non-pharmacological treatment and to avoid polypharmacy if possible. Caregiver burnout is common, thus caregivers should have their own support systems in place and seek help when it is needed.

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