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Opinion Article

Pharmacology in people with profound Intellectual and multiple disabilities

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Abstract

The treatment of polypathologies in People with profound intellectual and multiple disabilities is poorly documented. There are no specific studies on such populations. The aim of this article is therefore to draw on the author's experience over 12 years in a specialized establishment to propose some pharmacological avenues.

Keywords: People with profound intellectual and multiple disabilities, mood disorders

Introduction

People with profound intellectual and multiple disabilities (PIMD) present with severe mental disability and motor impairment, leading to extreme restriction of autonomy and possibilities of perception, expression and relationships [1]. People, in addition to cognitive impairments, may have physical, sensory and other health problems. Researchers have reported that the more severe an intellectual disability a person has, the more likely they are to have hearing, vision, physical health, and health problems such as epilepsy or gastrointestinal problems [2].

Children and adults with PIMD have more than one disability, the most significant of which is a profound learning disability. All people who have profound and multiple learning disabilities will have great difficulty communicating [3]. Many people have additional sensory or physical disabilities, complex health needs or mental health problems. The combination of these needs and/or lack of appropriate support can also affect behavior [4].

Pharmacological treatments are not fundamentally different from those of non-disabled people. However, people with PIMD require significant, sustained, and complicated health care. All of the recently identified problems in the health care of people with intellectual disabilities apply to adults with PIMD [5]. In addition, people with multiple disabilities face several specific problems; adult services are often not sufficiently developed to recognize and intervene effectively:

- Postural care: inability to protect body shape, detrimental movement, breathing and eating
- Dysphagia: swallowing problems, harmful nutrition, breathing and resistance to infections
- Epilepsy: poorly controlled seizures, preventing activity
- These problems can lead to discomfort, pain and premature death.

A fourth area identified by families and professionals is the detection of pain and induced distress; resulting in the provision of effective pain relief and the need for treatment of the underlying cause.

To talk about the pharmacology of PIMD is to take up an immense challenge as the pathologies encountered are multiple. However, there are constants in these subjects, notably epileptic seizures, behavioral disorders, often leading to the prescription of psychotropic drugs.

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Anxiety

Anxiety is associated with more severe levels of PIMD; the discovery is often unexpected. This can be explained by the fact that people with PIMD who live in a home such as a specialized reception center are in fact more seriously affected. People with PIMD by definition have comorbidity problems and difficulty communicating correctly, which leads to a diagnostic deficit and increased use of medications [6]. In addition, communication difficulties are considered an obstacle to access to care for people with multiple disabilities. For example, difficulties in understanding questions from medical staff; is a hindrance in the expected services.

The role of staff and environment illustrates the importance of knowledge and awareness of what is needed to provide supportive care to people with multiple disabilities [7]. Quality of care is a fundamental aspect of caring for people with complex and long-term needs and depends primarily on the help and support of staff in everyday life. Staff must demonstrate understanding, patience and professionalism in the delivery of health care. Additionally, research shows that people with multiple disabilities experience significant health care disparities, such as high levels of comorbidities and inappropriate medication prescribing, compared to patients without disabilities. A qualitative study of people having a multiple disability with a mild intellectual disability and suffering from anxiety and depression described "feelings of brokenness" in terms of emotional overwhelm and physical damage, fear and uncertainty [8]. These emotions, making them unable to detect warning signs and isolated due to their mental health issues. Identifying the problem is the first step to meeting their needs and reducing these health care disparities.

The prescription of anxiolytics does not necessarily address anxiety problems; in my practice for people with PIMD, I recommend reassurance. Benzodiazepines, which are reserved for seizures and which can be disinhibitory, should be avoided as much as possible [9]. Medications such as cyamemazine, or even serotonin reuptake inhibitors should be preferred (see next paragraph) [10]. The use of mild sedatives is also a good response. It is sometimes difficult to prescribe even mild sedatives, given the parents' reluctance?

Mood disorders

Contrary to the results concerning anxiety and anxiolytics, no excessive prescription of antidepressants is observed for people with intellectual disabilities. This could indicate that mood disorders occur with similar severity and duration in people with multiple disabilities as in the general population. Another interpretation could be that mood disorders are associated with difficult behavior to a lesser extent than anxiety, in people with multiple disabilities. People with multiple disabilities have a high risk of mood disorders. Although it is difficult to talk about mood disorders in people with multiple disabilities, although we can sometimes observe depressive symptoms or agitation or even disinhibition. Should we classify this symptomatology as a mood or behavioral disorder [11]?

Behavioral indicators indexing the depression profile in intellectual disability include: depressed affect, anhedonia, irritability, sleep disturbances, psychomotor agitation, decreased appetite, crying, and fatigue/loss of energy/lethargy [12]. Of these behaviors, all except depressive affect, fatigue/loss of energy/lethargy showed a relationship with depression, as they often exist outside of depression. However, in studies in people with multiple disabilities, the two main symptoms of depression, depressive affect and anhedonia, were found to discriminate between depressed and non-depressed groups. These findings should lead to the prescription of antidepressants.

It is difficult to choose a particular antidepressant, in fact, depending on the country and the habits of each of them, it is the antidepressants usually used that are chosen. My personal experience is to favor serotonin reuptake inhibitors, which, depending on the doses, can be used in the treatment of anxiety. Paroxetine can sometimes prove to be too anticholinergic (be careful with urinary retention), but the dosage of 20 to 50 mg per day covers a broad spectrum [13,14]. In my opinion, sertraline should be reserved for "obsessive" depression; as for escitalopram, it is probably the most powerful antidepressant [15,16].

Mood stabilizers are widely used, such as sodium valproate, more for anxiolytic and anticonvulsant purposes than to treat possible bipolarity, which is extremely difficult to diagnose, although periods of elation can sometimes be observed following periods of apathy [17]. These mood stabilizers should be considered in depressive episodes in people with multiple disabilities without there being any data from specific studies.

Psychotic symptoms

Psychotic symptoms are often encountered in people with multiple disabilities. These may be childhood psychoses never treated medically, but more often psychotic symptoms appearing following life events (somatic pain, brain aging, etc.) [18]. It is very difficult to make a diagnosis of psychosis or even childhood psychosis because children and then adolescents have stayed with their parents most of the time before coming to a specialized establishment [19]. Antipsychotic treatments are most of the time symptomatic because they respond to symptoms rather than a diagnosis of psychosis. The notions of delirium and hallucination are difficult to understand given the lack of oral expression. In patients with PIMD, it is reasonable to consider symptomatic treatment as it is difficult to find the etiology of the disorder, especially in adults.
The drugs most often used are antipsychotics such as quetiapine which can have a beneficial effect on mood (20) and risperidone which quickly proves sedative [21].

Comitiality

There are many people with multiple disabilities suffering from epilepsy, which means that the establishments which receive them are populated by individuals wearing helmets, in order to protect them from falls [22]. Many genetic diseases which contribute to multiple disabilities present with comitial episodes. The same is true for perinatal suffering or intrauterine strokes [23]. The most classic antiepileptic drug is valproic acid, which is also used as a mood stabilizer. It is therefore entirely welcome for epileptics with multiple disabilities. Given the serious forms of epilepsy in people with multiple disabilities, it is appropriate to use associations. Levetiracetam is often the mainstay of treatment, in combination with valproic acid, topiramate, lamotrigine, pregabalin, etc. [24].

Dysphagia

It is often necessary to offer foods that are easy to ingest, i.e. chopped, and gels for liquids; not for all those with multiple disabilities of course. It is indeed advisable to give foods that are as normal as possible to maintain their palatability [25]. Indeed, dysphagia problems often exist, as well as gastroduodenal reflux.

Gastroesophageal reflux disease (GERD) is a common disorder, and empirical treatment with proton pump inhibitors (PPIs) is often the first step in management; however, up to 40% of patients remain symptomatic despite PPI treatment. Refractory reflux refers to persistent symptoms despite an adequate PPI trial, and management remains difficult [26]. A combination of clinical assessment, endoscopic evaluation, and in some cases esophageal function testing can help characterize patients with refractory reflux symptoms into esophageal phenotypes so that appropriate treatment can be more optimally targeted. Medical options may then include the addition of an H2 receptor antagonist, alginates, baclofen, or antidepressant treatment [27]. In common practice, in people with multiple disabilities, proton pump inhibitors are used, which are medications used to reduce gastric acid secretion, such as omeprazole, lansoprazole, etc. It must be recognized that diagnoses are difficult in people with multiple disabilities. It is worth remembering that the main thing is: posture and texture. Which means that dysphagia problems are often linked to the poor posture of the multiple disabled people and often resolved by the consistency of food [28].

Conclusion

After 12 years of practice as a psychiatrist in an establishment receiving PIMDs, and a review of the literature, I came to the conclusion that there were few or no studies concerning the pharmacology and drug treatment of PIMDs. This article is the beginning of a reflection on the subject.

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