Efficacy of Lacosamide on an aged patient with behavioural impairment consisting in impulse dyscontrol, aggressiveness and insomnia

Flora Zarola | Director of the Unit of Parkinson’s Disease and Movement Disorders 2 ASL RM 6, Albano Laziale, Rome, Italy

Abstract

We describe the case of an 89 year old female patient affected by a degenerative/mixed dementia with altered behaviour associated to impulse dyscontrol and aggressiveness and insomnia. Moreover, she was the bearer of Paget disease and in treatment with antihypertensive and beta blocker therapy. In two different therapeutic attempts we have tried to use two different types of drugs: firstly trazodone and then quietapine, an atypical neuroleptic widely used in the elderly population (QTc value was obviously previously controlled). These attempts were ineffective also in association. Therefore a decision for Lacosamide 50 mg, bis in die, was taken. In fact, it is known that electrophysiological studies showed a selective potentiation of lacosamide on slow inactivation of voltage-gated sodium channels with a resulting in stabilization of hyper-excitabile neuronal membranes. After about two weeks the control clinical examination took over that the patient had an improvement of the behavioural disturbances.

Keywords

Behavioural dyscontrol; Aging, Lacosamide

Case report

Public Health Policy has developed programs for diagnosis, treatment and follow up of chronic diseases with severe impairment of patients compromised with autonomy; therefore unable to go to clinical ambulatory. This concern is usually seen in older people with several pathologies, including cardiovascular, orthopaedic, but especially neurodegenerative or cerebrovascular disorders. For this reason the figure of territory neurologist developed more and more prominence for these purposes. In particular, it has been shown a progressively higher incidence of behavioural and psycho-organic symptoms that severely compromise the management of patients and quality of family life, including the efficacy of caregivers (in the person of relatives or external, often foreign, caregivers). Usually the most common and urgent request which the neurologist on the territory is subjected is to give back the saneness of the whole family’s context. The main diseases presenting with serious symptoms are: after effects of ischemic or hemorrhagic stroke, Dementias like Alzheimer’s Disease, patients with psychiatric disorders undergoing to regressive syndromes linked to aging. The main symptoms to manage are aggressiveness, impulse dyscontrol, insomnia, dysphagia, persecution complex and other obsessive-compulsive behaviours. O.G., was an 89 yr old female, with previous hip fracture, Paget disease with deformities of sines in saber shape and of the little joints, calculi liver. She was affected by a degenerative/mixed dementia associated to organic impulse dyscontrol with aggressiveness and resistant insomnia, therefore it was included in the Unit for Home - Care Patients according to the complexity of pathologies and age. Several attempts of the neurologist to treat behavioural disturbances were performed by using prometazine up to 25 drops/die, trazodone 75 mg/die and quietapine up to 50 mg/die; this drugs were used both in monotherapy and in association particularly trazodone and quietapine. Due to the advanced age, and renal as well as hepatic malfunction the dosage of these drugs could not be increased and the use of valproic acid was contraindicated due to hepatic lithiasis.

It was not possible to increase the dosage of quietapine because of an increased risk of prolonged QT interval. After two months during clinical management a kidney cancer was diagnosed, without haematic signs of renal failure. Finally, it made the decision to adopt Lacosamide [1, 2] as a mood stabilizer, according to its peculiar pharmacological properties: in fact electrophysiological studies showed a selective potentiation of lacosamide on slow inactivation of voltage-gated sodium channels with a resulting in stabilization of hyper-excitabile neuronal membranes, therefore on basis of recent investigations this characteristic has a clinical equivalent in mood stabilization [1, 2].

The therapy started with 50 mg at the night time and increasing to 50 mg bis in die. After three weeks a new clinical access noted that the patient had a good improvement with the behavioural disorders: in particular, she showed a good compliance to care giver...
assistance being not aggressive during the daily care (hygiene, feeding and mobilization); moreover she was able to sleep several hours in the night. After two weeks the relatives took the initiative to reduce the drug to 50 mg only in the night time because the patients started to show drowsiness. The new dosage was effective to control symptoms even in a long term control.

Conclusion

This experience was useful for clinical practice because of almost two reasons: 1) Very often the neurologist is involved in critical situations with elder home patients with difficulties in behavioural diseases treatment, therefore we discovered the possibility to adopt one more pharmacological resource to add in the pool of drugs available for these important purposes; 2) It was demonstrated that the clinical experience on the territory helps to explore and develop new therapeutic strategies taking advantage on new generation drugs. For these reasons further investigations are requested to implement shared strategies and guidelines, even about Lacosamide in the treatment of behavioural disorders.

References
