

# New Approaches to Psychotic Agitation: Staccato Loxapine

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**ABSTRACT:** *Psychomotor agitation is characterized as a psychiatric emergency that requires immediate assistance. It is characterized by a significant increase in or inappropriateness of motor activity, from those of minimal concern through to uncoordinated movements with no specific purpose, accompanied by alterations in the emotional sphere. To date, rapid and in the same time non-invasive pharmacological treatment has been required to make it possible to control symptoms with reasonable safety and tolerability.*

**Key words:** *Staccato loxapine, psychotic agitation*

## INTRODUCTION

Psychomotor agitation is characterised as a psychiatric emergency that requires immediate assistance.

It is characterised by a significant increase in or inappropriateness of motor activity, ranging from those of minimal concern through to uncoordinated movements with no specific purpose, accompanied by alterations in the emotional sphere.

It may have an organic, psychiatric or mixed origin.

Causes of agitation include psychotic ones, which can be found in schizophrenia and schizoaffective disorders, manic episodes, agitated depressions and delusional disorders.

Its undue management can have serious consequences, such as potential harm to the patient or his or her environment, with implications for subsequent follow-up of the case, such as poor patient predisposition towards the healthcare environment in future interventions.

To date, rapid and at the same time non-invasive pharmacological treatment has been required to make it possible to control symptoms with reasonable safety and tolerability (Hankin, Bronstone, & Koran, 2011).

Loxapine inhalation powder utilizes an antipsychotic with more than three decades of experience in a novel delivery system for the treatment of agitation associated with schizophrenia or bipolar mania.

In three short-term (24-hour), randomized, double-blind, placebo-controlled clinical trials, 259 patients received Adasuve 10mg. Based on pooled data from these trials, the most common adverse reactions were dysgeusia (14%), sedation (12%), and throat irritation (3%). Bronchospasms occurred in 0.8% of patients with no airway disease, 54% of patients with asthma (12% with placebo), and 19% of patients with COPD (11% with placebo) (Valdes, Shipley, & Rey, 2014).

Staccato loxapine provides a novel new option for use in the acute treatment of agitation in patients with bipolar disorder or schizophrenia in an emergency setting; this option combines fast acting effects with a non-invasive route of administration (Keating, 2013).

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## REASON FOR CONSULTATION

The patient, who was being monitored by the Mental Health Unit, attended our clinic on an emergency basis, accompanied by her husband.

## PERSONAL HISTORY

### Somatic

Hypothyroidism, which was being treated with 50mg levothyroid. The patient stated that she did not have any other surgical or medical history of interest.

### Psychiatric

The patient had been diagnosed with schizophrenia. The disease first appeared at 18 years of age with a psychotic episode; evolution with decompensation phases.

### Family History

Paternal grandmother with a psychotic disorder.

### Present Illness

The patient had a diagnosis of ICD 10 F20.0. Paranoid Schizophrenia with 25 years of evolution. She had been clinically stable for the past 5 years.

On examination, she was conscious, with preserved autopsychic and allopsychic orientation. She did not cooperate during the interview and was vociferous, invaded personal space, was irritable, presented a dysphoric mood, was verbally and physically aggressive, verbalised insults with increasing motor gestures and presented psychomotor restlessness by banging on the furniture. This was consistent with symptoms of psychomotor agitation in the context of delusional behaviour.

Given the difficulty of the examination and the verbal and physical aggressiveness she presented, that made the clinical interview impossible to carry out, we decided to administer staccato loxapine (Adasuve).

With a calm and respectful attitude we approached the patient within her field of vision. With a gentle and quiet voice we explained

in a simple and clear way the causes of her distress, we proposed dialogue as a way out of this situation for her and we offered the help of psychopharmacological treatment. We avoided the display of judgemental or confrontational attitudes at all times.

We activated the device and asked the patient to put its mouthpiece between her lips and take a steady, deep breath, explaining to her that the drug will “help her, in this unpleasant moment, by decreasing her tension and making her feel more relaxed”. With this explanation, the patient agreed to cooperate while the drug was administered.

After the deep and steady inhalation, the patient exhaled a small amount of aerosol through her mouth. She did not display any immediate negative responses except for commenting on its bad taste.

Device was checked to verify that the administration had been properly performed.

The patient was isolated in the nursing room for environmental containment and observation. T0 (00 min) baseline PEC scale: 18; administration of inhaled Loxapine 10mg.

T1 (08 min) The psychomotor agitation ceased. PEC Scale: 7

T2 (60 min) No adverse effects. Continued stable. PEC: 6

After administration of the drug, the patient was more cooperative and less suspicious, making it possible to continue the interview and perform the psychopathological examination.

The patient maintained attention and eye contact and did not display mnemonic failures. She presented spontaneous speech with no significant alterations in the thinking process. In form: there were no notable alterations. In content: delusions of a mystical type. Megalomania: “I’m a virgin, I have jewels...”. She reported having had an abortion and seeing the egg: “I don’t want my blood taken because it’s worth a lot of money”. She appeared interpretative with the environment, using self-references and prejudiced ideas. She had delusions of influence; she refused to sit down “because you’re going to steal my movement” and refused to take treatment because “it would steal her smells”. She presented Capgras syndrome, referring to her husband as an impostor (a symptom that always featured in her psychopathological decompensations). Despite denying alterations in her sensory-perceptive sphere, the hallucinatory behaviour she presented, her thought blocks and the information provided by her husband indicated the presence of kinaesthetic hallucinations. Affection: consistent with delusional experience. Appetite and sleep preserved. No thoughts of suicide or self-harm at that moment.

## ACTION PLAN

Following the initial agitation presented by the patient, which ceased after administration of the treatment enabling a subsequent approach and psychopathological examination, the patient was discharged with weekly check-ups as she had good family support. The patient’s family had decided to handle the current episode on an outpatient basis the patient appearing to be more cooperative with this decision.

## DISCUSSION

Taken to the extreme, agitation can be a serious risk to the patient, family members, health workers and the environment in general.

It requires immediate action to ensure patient safety, aimed at achieving an appropriate and effective approach to agitated, aggressive or violent behaviour which in turn enables further intervention.

Symptomatic treatment of psychomotor agitation is aimed at containment, initially verbally and using an oral drug treatment; if

this fails, it is necessary to resort to measures such as mechanical containment and intramuscular treatment to intercept escalating agitation and violence with maximum safety for the patient and other people involved (Powney, Adams, & Jones, 2012).

Every emergency is associated with a risk; we need a clinical diagnosis and therapeutic measures to conduct ad-hoc care which must be established urgently.

Besides the risks involved in a General Emergency, there are also behavioural disorders and in many cases unpredictable and ambiguous demands that can impede an adequate healthcare.

Sometimes it is necessary to postpone the diagnosis and initially perform a containment of symptoms in order to later reassess the patient when conditions allow. The initial diagnosis will therefore be made based on disturbed behaviour syndrome and the psychopathological organization disorder will be examined when the conditions permit.

As in our case, it is crucial to have symptomatic treatment available which is easy to administer in an outpatient setting and with rapid onset of action in order to intercept the progressive escalation of symptoms, thus avoiding behaviours that pose a risk to the patient and third parties, and which allow us to perform a proper examination so that the etiological treatment of the cause that produced the agitation can be carried out (Citrome, 2013; Allen, Feifel, Leshem et al., 2011).

Loxapine acts as an antagonist at central serotonin and dopamine receptors. This mechanism of action explains its antipsychotic effects.

On the other hand it is very important to consider patient-preferred options in the treatment of psychotic agitation, so in this case this inhalation device was the best alternative compared to other treatments (using oral or intramuscular routes).

Once the initial containment and diagnosis have been done, we can continue with the appropriate action plan, readjusting treatment, admitting the patient or referring him or her for discharge.

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