Journal of Nursing and Occupational Health
JNOH, 2(3): 217-218
www.scitcentral.com

Mini Review: Open Access

Spravato (Esketamine)

Nirosha V*

[*]Vivekanandha College of Nursing, Tiruchengode, Namakkal, Tamilnadu, India.

Received January 03, 2019; Revised February 03, 2020; Accepted February 05, 2020

INTRODUCTION

Top of form

Spravato (esketamine) nasal spray is a non-competitive N-methyl D-aspartate (NMDA) receptor antagonist approved in March 2019. It is absolutely indicated for use, in union with an oral antidepressant, for the treatment of treatment-resistant depression (TRD) in adults. It is supplied as a spray for intranasal administration [1].

Class

NMDA antagonists, antidepressants.

DOSAGE

Induction phase

During 1 to 4 weeks it is administered twice per week-Day 1 the dose starts with 56 mg followed by consequent doses of 56 mg or 84 mg [1].

Maintenance phase

During 5 to 8 weeks it is administered 56 mg or 84 mg weekly once. At 9th week and after administer 56 mg or 84 mg every 2 weeks once [1].

PHARMACOKINETICS

Spravato when administered through nasal spray the absorption is rapid. The mean unlimited non-liability is about 48%. The time taken to achieve peak esketamine plasma concentration is 20-40 min after the last nasal spray period. Noresketamine is metabolized by CYP-dependent pathways and certain consequent metabolites endure glucuronidation and excreted mainly through the kidneys. The elimination half-life varies from 7-12 h [1].

DRUG INTERACTIONS

- Central nervous system depressants: Increase sedation.
- Psychostimulants: Increase blood pressure.
- Monoamine oxidase inhibitors: Increase blood pressure.

INDICATIONS

Treatment resistant depression.

MECHANISM OF ACTION

Spravato's destination is the N-methyl-D-aspartate (NMDA) receptor in the brain. The mechanism by which esketamine utilize its antidepressant ramification is unknown. The major circulating metabolite of esketamine prove activity at the same receptor with less compatability [1].

CONTRAINDICATIONS

- Aneurysmal circular disease (including thoracic and abdominal aorta, intracranial and peripheral arterial vessels) or arteriovenous deformation.
- Complaints of intracerebral hemorrhage.
- Prone to ketamine [1].

ADVERSE EFFECTS

Dissociation, dizziness, nausea and vomiting, unsteadiness, headache, dysgeusia, hypoesthesia, anxiety, Drowsiness, sedation, high blood pressure , sleeping disturbances, loose stools, nasal discomfort, throat irritation, dry mouth, feeling thirst, dysarthria, euphoric mood, hyperhidrosis, constipation, feeling abnormal, mental impairment, flutter, pollakiuria, oropharyngeal pain, tachycardia [1].

PATIENT PREPARATION

- Check the BP before administering drug. If delayed it may cause gain and risk to client.
- Teach patient to blow nose before first device only.
- Tilt the head 45° and hold the device and keep medication inside the nose.

Corresponding author: Nirosha V, Associate Professor, Vivekanandha College of Nursing, Tiruchengode, Namakkal, Tamilnadu, India, E-mail: niroshanbalagan@gmail.com

Citation: Nirosha V. (2021) Spravato (Esketamine). Int J Med Clin Imaging, 2(3): 217-218.

- See specific information for accurate about administration technique.
- Food and liquid ingestion
- Food: Do not take meal for at least 2 h before administration.
- Liquids: Do not drink liquids for at least 30 min before administration [1].

NURSES RESPONSIBILITIES

- During and after administration of each treatment period, observe the patient for 2 h.
- Measure blood pressure 40 min post dose and later as clinically assured until values fall.
- Refer patients notice symptoms of a hypertensive crisis (eg. chest pain, shortness of breath) or hypertensive encephalopathy (eg. sudden severe headache, visual disturbances, seizures, diminished consciousness, or focal neurological deficits) urgently for emergency care.
- Closely monitor the blood pressure with adjuvant use of psychostimulants or MAOIs.
- Teach clients not to indulge in potentially difficult activities (eg. driving a motor vehicle, operating machinery).
- Clients with history of hypertensive encephalopathy need to periodically monitor blood pressure.
- During the missed treatment term it is better to avoid missing drug dosing schedule since it gets worsened symptoms.

ADDITIONAL INFORMATION

The Spravato drug label comes with the following Black Box Warning: Risk for sedation and dissociation after administration. Monitor patients for at least two hours after administration [1].

● More chance for abuse and misusing the drug. Examine the client's signs and symptoms of abuse and misuse. Spravato is only feasible through a restrained program called the Spravato REMS [1].

● While taking the drug patient may be prone to get suicidal thoughts and behaviors in children and young adults. This is not advisable for pediatric patients [1].

PATIENT COUNSELING INFORMATION

Sedation and dissociation

Inform patients that Spravato has potential to cause sedation, dissociative symptoms, perception disturbances, dizziness, vertigo and anxiety. Advice the patients that they will need to be observed by a health care provider until these effects resolved [2,3].

Potential for abuse, misuse and dependence

Advice patients that Spravato is a federally controlled substance because it can be abused or lead to dependence [2,3].

Suicidal thoughts and behaviours

Advice patients and caregivers to look for the emergence of suicidality, especially early during treatment and when the dosage is adjusted [2,3].

Increase in blood pressure

Advice patients that Spravato can cause increase in blood pressure. Inform patients that after treatment sessions they should be advised that they may be need to be observed by a health care provider for at least 2 h after administration of Sparavato [2,3].

Impaired ability to drive and operate machinery

Spravato administration may impair the ability to drive or operate machinery. Instruct patient not to engage in potentially hazardous activities requiring complete mental alertness and motor coordination such as driving a motor vehicle or operating machinery until the next day after a restful sleep. Advice the patients that they will need someone to drive them home after each treatment session [2,3].

REFERENCES

1. Janssen Pharmaceuticals (2019) 1. Spravato (Esketamine) nasal spray, CIII (prescribing information).
2. Psychopharmacologic Drugs Advisory Committee (PDAC) and Drug Safety and Risk Management (DSaRM) (2019) FDA briefing document for Spravato. Advisory Committee Meeting.
3. Janssen Labels (2019) Spravato prescribing information. Available at: https://www.janssenlabels.com/package-insert/product-monograph/prescribing-information/SPRAVATO-pi.pdf