Efficacy and Safety of esketamine in major depressive disorder: A case series

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## Background and Importance
The treatment of the resistant major depressive disorder (RMDD) represents a challenge, and new drugs such as esketamine seek to achieve clinical improvement that is difficult to manage with current treatments. Our hospital is the health center in Spain with the highest number of patients treated with esketamine (approved as compassionate use in December 2019).

## Aim and Objectives
To evaluate the efficacy and safety of esketamine in patients with RMDD.

## Material and Methods
Observational, descriptive, retrospective study, conducted in a tertiary hospital.

### Data collected
- Sex, age
- Previous antidepressive drugs/therapies used
- Days in treatment with esketamine
- Final dose achieved
- Clinical response
- Adverse drug reactions
- Cause of discontinuation (if proceed)

Obtained from electronic medical records and Primary Care database.

## Results

### 6 patients

- **Sex**: 5 Male, 1 Female
- **Age**: Mean 57.2 years (DE 12.8)
- **Antidepressive treatments**: Mean of previous treatments 6.8 (DE 3.3)
- **Electroconvulsive therapy**: 3 patients

- **Mean time on treatment with esketamine**: 4.9 months (DE 2.8)
- **Clinical response**
  - 56 mg: 16.7%
  - 84 mg: 83.3%
  - After 3 doses: 66.7%
  - After 1 dose: 33.3%

### Adverse drug reactions

- **Dizziness**: 84 mg 83.3%
- **Paresthesia**: 56 mg 16.7%
- **Dissociation**: 84 mg 83.3%
- **Increased blood pressure**: 56 mg 16.7%
- **Nausea**: 56 mg 16.7%

- **Final dose achieved**: 56 mg 16.7%
- **Clinical response**: 84 mg 83.3%
- **Adverse drug reactions**: 84 mg 83.3%
- **Cause of discontinuation**: 84 mg 83.3%

- **Duration of treatment**: 4.9 months (DE 2.8)
- **Discontinuation**
  - 1 in remission
  - 2 not achieved a sustained response after finishing treatment
  - 1 discontinued due to ADR (fear of dissociative symptoms).

## Conclusions and Relevance
- All patients reported clinical improvement after three doses of esketamine. One of the four patients who finished treatment continued in remission.
- Dizziness and paresthesia were the most frequent ADRs.
- These results should be contrasted in a larger sample of patients.