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An evaluation of the impact of paliperidone and

aripiprazole long acting injections on hospital

admissions and occupied bed days

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•After LAI treatment, hospital admissions reduced to 17 for patients receiving aripiprazole (average length of treatment 539 days) and 12 for paliperidone (average length of treatment 735 days). The percentage decrease in admissions for aripiprazole and paliperidone were 55% and 85% respectively (as shown in Table 2).

**Conclusion**

•The results showed an overall decrease in hospital admissions and the number of occupied bed days for both paliperidone and aripiprazole treated patients.

•This correlates with previous literature on long acting injections.1 However, a larger scale study is required to provide further evidence and to compare with oral antipsychotic treatment.

**References**

1. Taylor D, Olofinjana O, ‘Long-acting paliperidone palmitate – interim results of an observational study of its effect on hospitalisation’, International Clinical Psychopharmacology, 2014; 29(4):229-234. 

manually searched and assessed for inclusion into the study.

•The inclusion criteria included patients diagnosed with schizophrenia /schizoaffective disorder who were treated with LAI paliperidone or aripiprazole, and whose medical notes were available prior to initiating the LAI.

•Exclusion criteria included patients on an LAI at first contact or those who had only had one dose of LAI administered.

•All patient data was anonymised.

•Descriptive statistics were used to analyse the data.

•Ethics approval was not required.

**Results**

•Data was combined for both paliperidone and aripiprazole across both Trusts.

•In total 58 patients initiated on LAI paliperidone and aripiprazole were included in the study: 29 on paliperidone (50%) and 29 on aripiprazole (50%).

•The total number of occupied bed days over 3 years prior to administration with aripiprazole was 3304 and 2733 for paliperidone.

•The number of occupied bed days following administration was 1019 for aripiprazole and 1088 for paliperidone (percentage decrease 69% and 60% as shown in Table 1).

•The number of hospital admissions prior to administration of LAIs was 38 for patients receiving aripiprazole and 82 for patients receiving paliperidone.

Introduction

•Paliperidone and aripiprazole are second- generation antipsychotics available as long acting injections (LAIs) and potentially beneficial for patients with poor adherence to oral medication.

•A previous study found that patients’ hospital admissions decreased following initiation of paliperidone LAI1, but the study did not include aripiprazole.

•This study looked at the impact of paliperidone and aripiprazole on hospital admissions and occupied bed days.

Aim

•To investigate the impact of paliperidone and aripiprazole LAIs on hospital admissions and occupied bed days with a proposed 12 month follow-up.

Methods

•A mirror image method was used to obtain patient data, prior to and following initiation of an LAI on the number of occupied bed days and the number of mental health admissions.

•This ensured the same patients were

observed both prior to and following initiation of the LAI and reduced the

influence of other factors such as age,

ethnicity, and comorbities affecting the

results obtained.

•In two Mental Health Trusts in the West Midlands, the medical notes for patients whose pharmacy records indicated that they had been supplied an LAI were

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| |  |  |  | | --- | --- | --- | | **LAI** | **Paliperidone** | **Aripiprazole** | | Total number of patients  (% of total) | 29  (50%) | 29  (50%) | | Total occupied bed days over a three-year period prior to LAI | 2733 | 3304 | | Number of occupied bed days post LAI | 1088 | 1019 | | Percentage decrease in occupied bed days following LAI | **60%** | **69%** |   **Table 1:** The effect of paliperidone and aripiprazole LAI administration on occupied bed days. | |  |  |  | | --- | --- | --- | | **LAI** | **Paliperidone** | **Aripiprazole** | | Total number of patients  (% of total) | 29  (50%) | 29  (50%) | | Total admissions over a three-year period prior to LAI | 82 | 38 | | Number of admissions post LAI | 12 | 17 | | Percentage decrease in admissions following LAI | **85%** | **55%** |   **Table 2:** The effect of paliperidone and aripiprazole LAI administration on admissions. | Paliperidone.svg  Paliperidone structure - By Fvasconcellos (talk · contribs) - PubChem, Public Domain, https://commons.wikimedia.org/w/index.  php?curid=1330283Structural formula of aripiprazole  Aripiprazole structure - By Vaccinationist - Own work, based on PubChem, Public Domain,  <https://commons.wikimedia.org/w/index.php>?  curid=54512031 |