

Abstract

Background

Depot antipsychotic drugs have played a pivotal role in managing schizophrenic patients with poor oral drug compliance and treatment resistance. However, there is a lack of systematic reviews which summarize both clinical and economic outcomes from comparative studies of depot medications which can be applicable to local psychiatric practice.

Objectives

To evaluate cost and outcomes of prescribing each of the four locally available depot antipsychotic medications.

Methods

To determine the pooled clinical outcome differences among the four depot drugs by means of meta-analyses, and to estimate the cost of clinical use of each depot drug by using Markov health transition-state modeling.

Results

Meta-analyses on 11 qualified studies indicated that: i) Zuclopenthixol decanoate has increased risk of requirement for anticholinergic drugs in comparison with Haloperidol decanoate/Flupenthixol decanoate (Peto OR: 4.83 CI 1.54-15.09). ii) When comparing with Zuclopenthixol decanoate/Fluphenazine decanoate, Flupenthixol decanoate has less risk of extrapyramidal side effects (Peto OR: 0.15 CI 0.05-0.43; NNT: 3 CI 2-7) and less risk of requiring anticholinergic drugs (Peto OR: 0.29 CI 0.13-0.66). iii) In comparison of Fluphenazine decanoate with

Haloperidol decanoate/Flupenthixol decanoate, it has increased risk of drop out from trials (Peto OR: 1.83 CI 1.02-3.28) and increased risk of anticholinergic drug requirement (Peto OR: 1.88 CI 1.04-3.40). Conventional vote counting procedure did not suggest definite efficacy differences among the four depot medications.

The average total cost accrued for one patient in one-year duration with prescription of zuclopenthixol decanoate, flupenthixol decanoate, Fluphenazine decanoate and haloperidol decanoate (in Hong Kong dollars) were \$59504, \$62957, \$72046, and \$75756 respectively.

Conclusions

Provided that there is no new evidence suggesting difference in efficacy among the depot drugs at this stage, zuclopenthixol decanoate is probably the drug of choice if there are no extrapyramidal side effects because it is likely the most cost saving. Flupenthixol decanoate can be considered as alternative if extrapyramidal side effects occur.

Declaration of interest

None.