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EFFICACY AND SAFETY OF TIAPRIDE FOR CHOREA TREATMENT IN HUNTINGTON'S DISEASE: A SYSTEMATIC REVIEW

Introduction

(deu)Tetrabenazine, since 2008 the only FDA approved drug to treat chorea in Huntington's Disease (HD), is not suited for every HD patient due to side effects (depression/ suicidality). In the Netherlands (NL), tiapride is used as an alternative. This antipsychotic was already available in 1982. Tiapride selectively blocks D_2- and D_3-receptors and is highly affordable (€0,55/day for 200 mg compared to tetrabenazine €5,00/day for 100 mg). However, tiapride was recently taken off-market in NL by its producer without rationale. Therefore, we conducted a systematic review to assess efficacy and safety of tiapride in HD.

Methods

Systematic search in PubMed, Web of Science, PsychInfo, Embase and the Cochrane library:
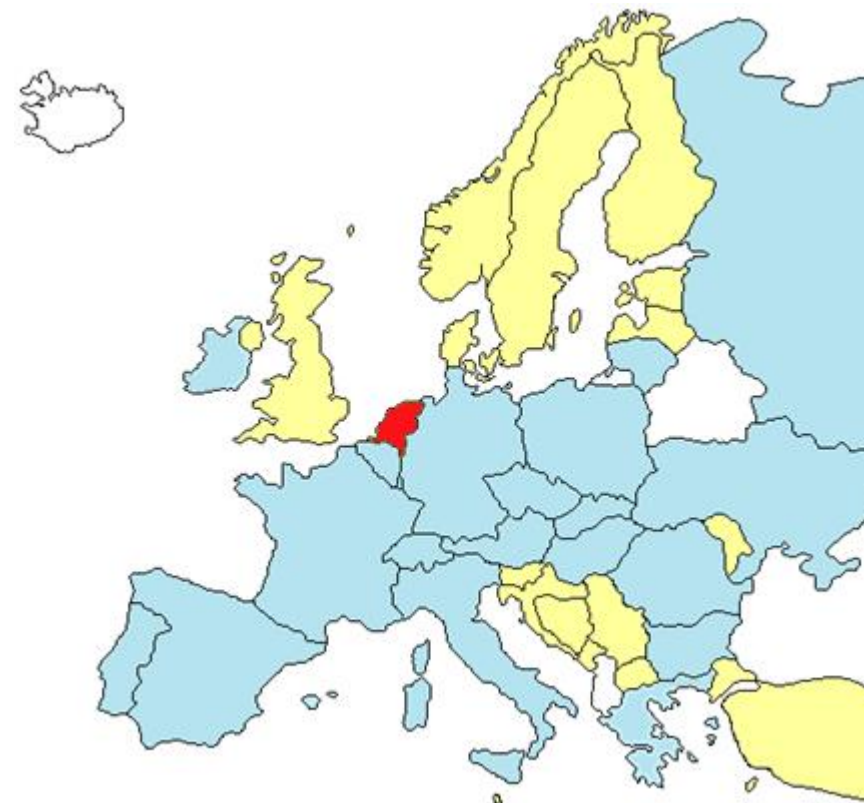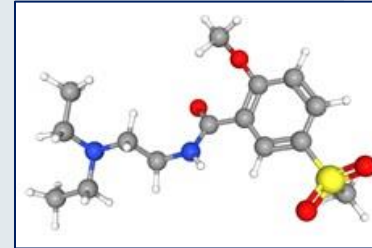- Original research
- Efficacy and/or toxicity of tiapride
- Expert opinions on prescription preferences included

Databases for safety profile:
- Patient leaflet
- (NL) Lareb
- (EU) EudraVigilance
- (WHO) VigiAccess

Tiapride availability in EU
Blue   available
Yellow   not available
Red   NL
White   unknown

Results

Efficacy:
11 articles with original data:
- Majority (7 out of 11) chorea improvement.
- No study reported significant worsening of chorea.
- Due to limited sample size, not all studies reported p-values.

3 expert opinions:
- (EU) 50% of respondents prefer tiapride as first choice chorea monotherapy.
- Especially favored when comorbid behavioral symptoms are present.
- No USA data available, since tiapride was never registered in the USA.

Safety:
- No major safety concerns.
- (WHO) In 40 years only 22 cases of tardive dyskinesia reported. Causality unknown.
- Side effects are rare (<10%) and mild:
  - Fatigue
  - Drowsiness
  - Mildly elevated prolactin levels

Conclusion

Tiapride can be an effective and safe alternative to tetrabenazine.
Tiapride is highly affordable to treat chorea in HD, with a mild and well-tolerated side effect profile.