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JOINT EVENT

4th International Conference on **Epilepsy & Treatment**

&

4th World Congress on **Parkinsons & Huntington Disease**

August 29-30, 2018 | Zurich, Switzerland

R C Hider

King's College London, UK

Iron chelation as a potential therapy for the treatment of Parkinson's disease

Inappropriate accumulation of iron in the dopaminergic region of the brain has been associated with Parkinson's disease. Deferiprone is a selective, orally active iron chelator which has been used in several clinical trials designed to monitor its efficiency in the treatment of Parkinson's disease. An improvement of both motor and mental performance has been observed in several patients. During such treatment, a decrease in the iron content of substantia nigra was observed using MRI. Unfortunately, deferiprone is associated with agranulocytosis, which occurs in a small percentage of patients. This necessitates weekly recording of white cells counts, which would not be ideal in the treatment of Parkinson's disease patients. Over the past eight years we have been developing deferiprone analogues which are orally active, cross the blood brain barrier and (to the best of our knowledge) lack the agranulocytosis side effect. The properties of this molecular class will be discussed at the conference.

Biography

R C Hider is Professor of Medicinal Chemistry at King's College London, where he has worked since 1987. Prior to this, he was a Lecturer in Biological Chemistry at Essex University. He has worked with siderophore-based iron uptake processes in microorganisms and the absorption of iron by mammalian cells. His work on membrane structure and transport mechanisms has led to the development of novel oral iron chelators for the treatment of iron overload.

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