

# Correspondence

## Treating ALS

In a recent edition of the *Journal of Orthomolecular Medicine*<sup>1</sup> I argued that Parkinson's disease, multiple sclerosis (MS) and amyotrophic lateral sclerosis (ALS) all occurred as a consequence of an excess of glutamate. In subsequent correspondence,<sup>2</sup> I suggested that nicotine, a glutamate antagonist, would prove to be protective against Parkinson's disease, in part, because it augments dopaminergic neurotransmission.<sup>3</sup> I am happy to report that Dr. Paul Newhouse of the University of Vermont has since shown that 15 Parkinson's patients made substantial physical and mental improvement whilst wearing the nicotine patch.<sup>4</sup> If my iodine-dopachrome-glutamate hypothesis is correct, I expect nicotine will also be helpful in the treatment of both MS and ALS.

In the original paper,<sup>1</sup> I further argued that levodopa should prove to be of benefit in the treatment of all three disorders, but could provide only evidence of its value in Parkinsonism and MS. Subsequently I have discovered a very stimulating thirty-year-old paper, authored by Dr. André Barbeau, the then Director of the Department of Neurobiology at the Clinical Research Institute of Montreal.<sup>5</sup> This paper describes an attempt to explore the value of additional dopamine in the treatment of a wide range of disorders, including Parkinson's disease, ALS, Steele-Richardson-Olszewski syndrome, Torsin dystonias, Wilson's disease, Pick's and Jakob-Creutzfeldt diseases, renal function, mania and depression. Of particular interest here are Barbeau's comments on levodopa's impact on amyotrophic lateral sclerosis.<sup>5</sup>

"The knowledge that symptoms of this disease (ALS) were often present in patients afflicted with Parkinson-dementia complex led us, as a last measure, to try L-dopa in a few advanced cases. The preliminary results are surprising, and although we do not understand them, they are of such a nature as to warrant further con-

trolled studies."

I have searched, without success, for any additional literature published by Dr. Barbeau and/or his colleagues, describing the impact of levodopa on advanced ALS. However, the quotation just provided suggests to me that his initial use of levodopa produced improvement in the well being of advanced ALS patients. If this interpretation of his comments is correct, it provides further evidence to support the iodine-dopachrome-glutamate hypothesis.<sup>1</sup>

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## References

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