

NEUROLOGICAL PICTURE

Electrocardiography in a patient with tremulant Parkinson's disease



Electrocardiography of an 82 year old patient with tremulant Parkinson's disease recorded on admission to hospital.

Top—A 4 Hz-tremor caused an artifact, which could lead to the erroneous diagnosis of atrial fibrillation in Wolff-Parkinson-White syndrome or ventricular flutter. A closer look, however, allows identification of the artifact: in lead III the tremor is not visible (tremor amplitude was smallest in the left leg) and the underlying QRS complexes can be recognised (arrowheads in V2).

Below left—Lead V2 was digitised at a sampling frequency of 400 Hz and filtered to eliminate the 4 Hz tremor. Underlying QRS complexes are now readily visible and occur at a frequency of 96 bpm. The pulse rate of the patient, who did not show any sign of cardiac distress, was 96 bpm.

Below right—After 10 days of treatment with amantadine and levodopa tremor had almost disappeared and the ECG showed normal sinus rhythm (Lead V2)

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