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Treatable Sydenham Chorea in 76-year-old woman

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Albrecht Kunze: Drafting/revision of the manuscript for content&comma; including medical writing for content; Study concept or design; Analysis or interpretation of data; Additional contributions (in addition to one or more of the above criteria)

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Christoph Strasilla: Major role in the acquisition of data; Analysis or interpretation of data; Additional contributions (in addition to one or more of the above criteria)

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A 76-year-old woman presented with asymmetric Chorea (Video 1) that has evolved within the last six weeks before admission. The cMRI showed no brain lesions apart from slight cerebral small vessel disease (Figure 1A-B). The  $^{18}\text{F}$ -FDG-PET revealed an increased striatal metabolism (Figure 1C-F) that has been reported in young patients with Sydenham Chorea following Streptococcus infections <sup>1, 2</sup>. Additional laboratory tests yield an elevated anti-streptolysin O (ASO) titer with 1352 IU/ml (Ref<200IU/ml). Suspecting a Sydenham Chorea, we initiated a treatment with the antibiotic clarithromycin combined with immunomodulatory treatment (methylprednisolone and intravenous immunoglobulins) leading to significant improvement of the movement disorder (Video 1).

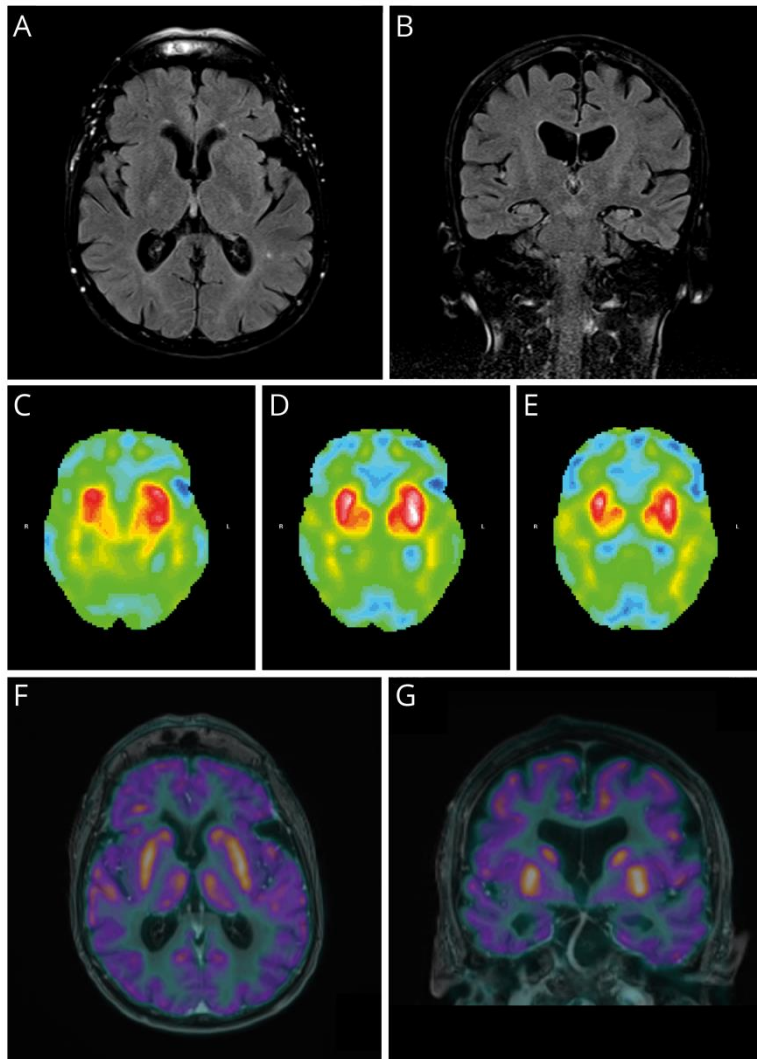
New onset Sydenham Chorea rarely occur in old age.  $^{18}\text{F}$ -FDG-PET can contribute to diagnosis by showing increased glucose uptake in the striatum. Affected elder patients may significantly benefit from drug treatment with antibiotics and immunomodulators.

(Additional information are listed in the Supplement (eAppendix1))

**Legends:**

**Figure 1:** Brain imaging in the acute stage of disease.

A-B, FLAIR sequences of MRI. Apart from slight signs of cerebral small vessel disease and moderate brain atrophy, the images were unremarkable. C-E,  $^{18}\text{F}$ -FDG-PET scan expressing hypermetabolism in the striatum of both hemispheres. F-G, MRI superimposed with PET images.



**Video 1:** Movie sequences show the patient before and after initiation of treatment.

WNL-2023-000660\_eapp1 ---<http://links.lww.com/WNL/D36>

WNL-2023-000660\_vid1 ---<http://links.lww.com/WNL/D37>

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