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# Efficacy of botulinum toxin A treatment in a case of pantothenate kinase associated neurodegeneration (PKAN)

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## DESCRIPTION

Our patient is a girl with pantothenate kinase associated neurodegeneration<sup>1</sup> and autosomal recessive transmission. She has marked contractions of the lower facial muscles and severe contraction of calf muscles, with both feet in a crooked position, more evident on the right side. Since infancy, she walked abnormally and was unstable when standing, due to progressive hypertonia of lower limbs, particularly in the medial calf muscles (tibialis posterior and medial gastrocnemius). She had a peculiar gait, with double support and using a rigid ankle-foot orthosis in both legs for internal foot rotation. Walking barefoot was impossible. Although she followed a thorough daily rehabilitation for balance and postural stability and hypertonia, clinical situation remained unchanged. We injected both legs with botulinum toxin A: 200 Dysport mU in the motor points of the tibialis posterior muscle and 200 Dysport mU in the medial part of gastrocnemius muscle. Results were strikingly positive (video 1). We observed a

gradual rapid reduction of hypertonia and correction of internal foot rotation. The patient achieved stability while standing and could walk independently, without orthosis and even barefoot. Her quality of life and socialisation, obviously, improved markedly. She continues daily rehabilitation and is injected regularly three times/year with positive results as the first time. Botulinum toxin treatment is efficient in degenerative diseases when hypertonia is a relevant symptom.

**Video 1** The patient before and after treatment.  
10.1136/bcr.07.2011.4514v1

**Competing interests** None

**Patient consent** Obtained

## REFERENCES

1. **Gordon N.** Pantothenate kinase-associated neurodegeneration (Hallervorden-Spatz syndrome). *Eur J Paediatr Neurol* 2002;**6**:243–7.

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