

Recurrent fractures in a Rett patient treated with teriparatide

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Rett syndrome is a common X-linked neurodevelopmental disorder caused by mutations in the MECP2 gene. Patients with Rett syndrome have a low bone mineral density and increased risk of fracture. The present case report describes a successful novel therapeutic intervention with teriparatide with one patient with Rett syndrome, after suffering from recurrent low-trauma fractures at intervals of several years. Because of the severity of bone involvement, the decision was made to treat with teriparatide. Teriparatide was administered in a dose of 20 µg subcutaneously daily for 8 months. After stopping teriparatide, the Rett girl received neridronate infusions once every 6 months at a dose of 100 mg per single session. Since the initiation of the treatment, there was an evident improvement at QUS and densitometric, in particular bone mineral density total body Z-score have improved from -5.2 to -4.1 DS. Furthermore, until the present, no new fractures have appeared. This is the first report in which teriparatide was administered to a subjects with Rett syndrome. In conclusion, this report has shown the effectiveness of teriparatide in the management of osteoporotic fractures in one subjects with Rett syndrome. This report provides evidence that increased knowledge of bone pathology and fracture prevention in Rett subjects is important and should be addressed in future studies.