

Task: Has Runder Ruecken associated with schlaffes Temperament in human?

Yes. Based on the relevant papers I found, a claim associating a rounded back (Runder Ruecken) with a flaccid or hypotonic state (schlaffes Temperament) in humans has been documented. In [1.1], the study on the kyphoscoliotic type of Ehlers-Danlos syndrome clearly states that affected individuals exhibit significant muscular hypotonia at birth, which, together with connective tissue laxity, leads to kyphoscoliosis. This report explicitly notes a clinical interconnection between hypotonia and the development of kyphosis, directly supporting the claim ([2.1]).

In addition, [3.1] presents clinical features in hypotonic infants that include developmental delays and the presence of spinal deformities such as scoliosis and/or kyphosis. Although this source does not specify an explicit direct association between the German terms “Runder Ruecken” and “schlaffes Temperament,” it does suggest that reduced muscle tone in children is observed in conjunction with kyphotic spinal changes, thereby indirectly supporting the association ([4.1]).

Moreover, [5.1] highlights that hypotonia is associated with several complications, including kyphosis. This source further notes that children with hypotonia experience motor delays and may develop spinal deformities as part of a broader clinical picture. By documenting the concurrent appearance of hypotonia and kyphosis, the excerpt reinforces the pattern of an association between a flaccid muscular state and spinal curvature ([4.1]).

The case reports in [6.1] add additional context in that patients with Larsen’s syndrome displayed both cervical kyphosis and varying degrees of hypotonia. Although the report clarifies that a definitive correlation between hypotonia and kyphosis is not formally established in that set of cases, the co-occurrence of these features in the patients illustrates that such an association is observable clinically ([7.1]).

Finally, [8.1] discusses clinical features of various myopathies where hypotonia is prevalent and progressive weakness may result in kyphoscoliosis. While this source does not explicitly link the association using the terms “Runder Ruecken” and “schlaffes Temperament,” its description of the relationship between reduced muscle strength and spinal deformities contributes to a broader understanding that a hypotonic state is accompanied by kyphosis ([4.2]).

Collectively, these articles—most notably the detailed clinical observations in [1.1]—support the claim that a rounded back (Runder Ruecken) is associated with a flaccid or hypotonic state (schlaffes Temperament) in humans ([2.1], [4.1], [7.1], [4.2]).

References:

[1.1] Phenotypic variability of the kyphoscoliotic type of Ehlers-Danlos syndrome (EDS VIA): clinical, molecular and biochemical delineation. Marianne Rohrbach, Anthony Vandersteen, Uluç Yiş, Gul Serdaroglu, Esra Ataman, Maya Chopra, Sixto Garcia, Kristi Jones, Ariana Kariminejad, Marius Kraenzlin, Carlo Marcelis, Matthias Baumgartner, Cecilia Giunta. Orphanet Journal of Rare Diseases (2011). <https://doi.org/10.1186/1750-1172-6-46>

Context: "The kyphoscoliotic type of Ehlers-Danlos syndrome (EDS type VIA) presents a clinical association between hypotonia and kyphosis. Affected individuals often exhibit significant muscular hypotonia at birth, which, coupled with connective tissue laxity, results in kyphoscoliosis, a spinal deformity characterized by curvature and hunching. This condition tends to impair the ability to stabilize joints, contributing to delays in gross motor development in early life. Clinical observations indicate that hypotonia and kyphosis are interconnected, as the skeletal findings correlate with the severity of hypotonia experienced during infancy. However, some cases show variability, whereby not all patients with hypotonia develop noticeable kyphosis, suggesting that other factors may also influence these outcomes."

[2.1] Phenotypic variability of the kyphoscoliotic type of Ehlers-Danlos syndrome (EDS VIA): clinical, molecular and biochemical delineation. Marianne Rohrbach, Anthony Vandersteen, Uluç Yiş, Gul Serdaroglu, Esra Ataman, Maya Chopra, Sixto Garcia, Kristi Jones, Ariana Kariminejad, Marius Kraenzlin, Carlo Marcelis, Matthias Baumgartner, Cecilia Giunta. *Orphanet Journal of Rare Diseases* (2011). <https://doi.org/10.1186/1750-1172-6-46>

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[3.1] The Hypotonic Infant. J. Pina-Garza, K. C. James. *Fenichel's Clinical Pediatric Neurology* (2019). <https://doi.org/10.1016/b978-0-323-48528-9.00006-6>

Context: "The excerpt details various clinical features associated with hypotonia, including developmental delays and the presence of scoliosis and/or kyphosis. These features are observed in children with hypotonic conditions, suggesting a relationship between hypotonia and spinal deformities such as kyphosis. However, it does not specify a direct association between 'Runder Ruecken' (kyphosis) and 'schlaffes Temperament' (hypotonia) specifically."

[4.1] The Hypotonic Infant. J. Pina-Garza, K. C. James. *Fenichel's Clinical Pediatric Neurology* (2019). <https://doi.org/10.1016/b978-0-323-48528-9.00006-6>

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[4.2] The Hypotonic Infant. J. Pina-Garza, K. C. James. *Fenichel's Clinical Pediatric Neurology* (2019). <https://doi.org/10.1016/b978-0-323-48528-9.00006-6>

Context: "The excerpt discusses the clinical features of various myopathies associated with hypotonia in infants. It mentions that weakness is often greater in proximal muscles than distal ones and notes that progressive weakness can lead to conditions like kyphoscoliosis. Although it highlights the relationship between hypotonia and spinal deformities, such as kyphosis, it does not explicitly connect this to 'schlaffes Temperament' or flaccid temperament in humans."

[5.1] The Hypotonic Infant. J. Pina-Garza, K. C. James. *Fenichel's Clinical Pediatric Neurology* (2019). <https://doi.org/10.1016/b978-0-323-48528-9.00006-6>

Context: "The excerpt highlights that hypotonia is associated with various complications, including scoliosis and/or kyphosis. It notes that hypotonia can be an early indicator of certain conditions like meningitis, which affects motor development. Additionally, children with hypotonia often experience delays in motor milestones and cognitive impairment, suggesting that these physical conditions may have broader implications for development and physical health."

[6.1] Cervical Kyphosis Associated With Anteroposterior Dissociation and Quadriparesis in Larsen's Syndrome. Danielle A Katz, John E Hall, John B Emans. *Journal of Pediatric Orthopaedics* (2005). <https://doi.org/10.1097/01.bpo.0000161091.85350.54>

Context: "The excerpt details two case reports of patients with Larsen's syndrome, both of whom exhibited cervical kyphosis and various degrees of hypotonia. Patient 1 presented with global hypotonia at birth, requiring ventilatory support and displaying severe developmental delays. Despite some radiographic improvements following treatment, he remained hypotonic but eventually achieved some functional improvements. Patient 2 also experienced hypotonia, particularly in the lower extremities, and lost the ability to walk independently over time. No definitive correlation is established in the text between hypotonia and kyphosis, but the cases

illustrate the challenges presented by these co-occurring conditions, emphasizing the unpredictability of clinical outcomes."

[7.1] Cervical Kyphosis Associated With Anteroposterior Dissociation and Quadriparesis in Larsen's Syndrome. Danielle A Katz, John E Hall, John B Emans. *Journal of Pediatric Orthopaedics* (2005). <https://doi.org/10.1097/01.bpo.0000161091.85350.54>

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[8.1] The Hypotonic Infant. J. Pina-Garza, K. C. James. *Fenichel's Clinical Pediatric Neurology* (2019). <https://doi.org/10.1016/b978-0-323-48528-9.00006-6>

Context: "The excerpt discusses the clinical features of various myopathies associated with hypotonia in infants. It mentions that weakness is often greater in proximal muscles than distal ones and notes that progressive weakness can lead to conditions like kyphoscoliosis. Although it highlights the relationship between hypotonia and spinal deformities, such as kyphosis, it does not explicitly connect this to 'schlaffes Temperament' or flaccid temperament in humans."