E-Poster

EP-505

From Disability to Possibility: A Case Report on Rehabilitation Strategies for Eight-and-a-Half Syndrome in a Young Stroke Patient

Topic: Health Conditions (Nervous System, Musculoskeletal System, Cardiopulmonary System)

Kaung Zaw Hein[1], Khalifa Giebaly[2], Mohankumar Mariappan[3]

[1]*Rehabilitation Medicine, Royal Wolverhampton NHS Trust, Wolverhampton, United Kingdom*
[2]*Elderly Care Rehabilitation, Royal Wolverhampton NHS Trust, Wolverahmpton, United Kingdom*
[3]*Rehabilitation Medicine, Royal Wolverhampton NHS Trust, Wolverhampton, United Kingdom*

BACKGROUND

Stroke in young adults presents unique challenges, particularly when accompanied by rare and debilitating conditions such as Eight-and-a-Half syndrome. This rare neurological disorder, characterized by a combination of one-and-a-half syndrome and ipsilateral facial nerve palsy, results in profound motor, sensory and visual impairments. The complexity of this condition highlights the intricate interplay of physical, ophthalmological and psychosocial challenges, underscoring the importance of tailored interventions to optimize recovery and reintegration into daily life

CASE DESCRIPTION

A 33-year-old left-handed female, employed as a project manager, presented with significant disability following a right pontine hemorrhage in 2015. Her past medical history includes hypertension which was defaulted since 2010, right central retinal vein thrombosis, psoriasis and a history of smoking and high alcohol consumption (50 units per week). A 2 cm pontine hemorrhage resulted in eight-and-a-half syndrome, manifesting as

- Neurological deficits: Right lower motor neuron facial palsy, internuclear ophthalmoplegia, leftward nystagmus with oscillopsia, slurred speech, dysphagia, left hemiparesis and sensory change with ataxia
- Ophthalmic complication: Right eye exposure keratopathy due to facial nerve palsy, lagophthalmos with Bell's phenomenon
- Functional status on follows up: Persistent left sided weakness (UL 4/5, LL 4+/5) and wheelchair dependence due to balance issues.
- Psychosocial impact: Delayed emotional trauma affecting engagement in rehabilitation.

DISCUSSION

Eight-and-a-half syndrome, a combination of one-and-a-half syndrome and a lower motor neuron facial palsy, leads to considerable disability requiring holistic rehabilitation. Key challenges include

- Motor recovery and mobility: Persistent weakness and ataxia necessitated intensive physiotherapy and assistive device training
- Ophthalmological management: Ongoing keratopathy required a temporary tarsorrhaphy and conservative interventions.
- Cognitive and emotional well-being: Psychological support addressed delayed emotional trauma.
- Social reintegration and independence: Home adaptations and workplace adjustments enhanced autonomy.

CONCLUSION

The case highlights the complex rehabilitation needs of young stroke survivors with eight-and-a-half syndrome. A multidisciplinary approach addressing motor, sensory, ophthalmological and psychosocial aspects is crucial for optimizing recovery and quality of life.

Statement of Disclosures

None

Corresponding Author:
Kaung Zaw Hein
Rehabilitation Medicine, Royal Wolverhampton NHS Trust, Wolverhampton, United Kingdom
Email: kaung.hein@nhs.net

Doi: 10.5606/archisprm.2026.EP-505