



Short Communication

## Effect of Mental Practice on Balance Confidence in Patient with Essential Tremor: A Case Report

*Dr Ashwini S Kalsait (PT)\*<sup>1</sup>, Dr Jaywant M Nagulkar (PT)<sup>2</sup>*

Department of physiotherapy, Dr Ulhas Patil College of Physiotherapy, Jalgaon, India

### ABSTRACT

**Background** - There is a lack of evidence examining the role of Mental Practice as a treatment of physical therapy on the activities specific balance confidence for patients with essential tremor (ET).

**Aim** - To check effect of mental practice on activity specific balance confidence in patient with essential tremor.

**Methodology**: A 71 -year-old male diagnosed with Epilepsy having essential tremor (on regular medication since 55 years) completed 15 sessions of mental practice at home on teleconsultation.

**Scoring** of The Essential Tremor Rating Scale (TETRS) , 6-Item The Activities -specific Balance Confidence (ABC) Scale were taken on first and last session.

**Result** - There is an improvement in activities on balance confidence and reduction in essential tremor were noted on scales.

**Conclusion** - This report describes a novel PT approach that offers a promising means for improving balance confidence with reduction in tremor.

**Keywords**: Mental Practice, Essential tremor, physical therapy, The Essential Tremor Rating Scale (TETRS), 6-Item The Activities -specific Balance Confidence (ABC)

**Abbreviations** - PT - Physical / Physio Therapy

### 1. Introduction

Essential tremor (ET) is a progressive neurological disease and is considered the most common movement disorder<sup>[1]</sup> Depression, anxiety and age are associated with increased functional disability in ET regardless of tremor severity. ET is also associated with a wide range of impairments, such as ataxia, postural instability, impaired tandem walking, and decreased gait speed which hampers confidence.<sup>[2]</sup> There is a paucity of research investigating rehabilitation for individuals with ET. Typically, individuals with ET will seek medical management to reduce tremor, such as pharmaceutical remedies or deep brain stimulation (DBS). Although DBS can diminish tremor but prolonged bilateral DBS is linked with postural instability and impairments in gait and balance in individuals with ET. <sup>[2,3]</sup> Also DBS not routinely preferred by patients . Considering current pandemic crises when actual patient visit not possible Telerehabilitationis aboon. Mental practice involves repetitive cognitive rehearsal of physical movements in the absence of physical, voluntary attempts. Mental practice alone is not as efficacious as mental practice coupled with physical practice, but it does elicit cortical and neuromuscular activations<sup>[4]</sup>

\*Corresponding Author - Dr Ashwini S Kalsait (PT)

Department Of Physiotherapy, Dr Ulhas Patil College Of Physiotherapy, Jalgaon ,India  
Email ID - 20asvision@gmail.com

## 2. Case Report:

A 71-year-old male patient diagnosed with Epilepsy having essential tremor (on regular medication since 55 years) taken 15 sessions of mental practice at home on teleconsultation.

Scoring of The Essential Tremor Rating Scale (TETRS), 6-Item The Activities-specific Balance Confidence (ABC) Scale were taken on first session followed by mental practice and on last session.

SESSION	TETRS	ABC
FIRST	21	70%
LAST	12	160%

On first session the essential tremor rating scale score was 21 which indicates more tremors and activities specific balance confidence scale score was 70% which indicates less confidence. After taking 15 sessions of mental practice at home on teleconsultation. On last session essential tremor rating scale score was 12 which indicates reduction in tremors and activities specific balance confidence scale score was 160% indicates increasing in confidence. Showed an improvement in activities on balance confidence and reduction in essential tremor were noted.

## 3. Results

This report describes a mental practice is a novel PT approach that offers a promising means for improving balance confidence with reduction in tremor. Also from a practical perspective, mental practice constitutes an attractive alternative to other rehabilitative approaches because it does not require physical rehearsal, can be performed without direct supervision, and requires minimal expense and equipment, facilitating ease of use.<sup>[4,5]</sup>

## 4. Clinical implication

Mental practice is a non-pharmacological treatment having enduring benefits which helps in boosting quality of life. Can be used as a routine practice. Further study can be done with large sample size, considering problems in detail and explore more.

## Acknowledgement

We sincerely thank Institution / team for permitting us to carry out research, special thanks to participants. We would also like to thank Mr Babar, Colleagues/ friends who supports, helps us for the research.

*Source of funding – None*

*Conflict of interest – None*

## References

1. Mayo NE, Wood-Dauphinee S, Côté R, Durcan L, Carlton J. Activity, participation, and quality of life 6 months poststroke. *Arch Phys Med Rehabil.* 2002;83:1035–1042.
2. Lai SM, Studenski S, Duncan PW, Perera S. Persisting consequences of stroke measured by the Stroke Impact Scale. *Stroke.* 2002;33:1840–1844.
3. Duncan PW, Bode RK, Min Lai S, Perera S; Glycine Antagonist in Neuroprotection Americans Investigators. Rasch analysis of a new stroke-specific outcome scale: the Stroke Impact Scale. *Arch Phys Med.*
4. Earhart GM, Clark BR, Tabbal SD, et al. Gait and balance in essential tremor: variable effects of bilateral thalamic stimulation. *Mov Disord* 2009;24:386–391. doi: 10.1002/mds.22356
5. Thanvi B, Lo N, Robinson T. Essential tremor-the most common movement disorder in older people. *Age Ageing* 2006;35:344–349. doi: 10.1093/ageing/afj072