TANTIA UNIVERSITY JOURNAL OF HOMOEOPATHY AND MEDICAL SCIENCE
www.tjhms.com

REVIEW ARTICLE

ROLE OF YOGIC MANAGEMENT IN PARKINSON'S DISEASE (KAMPVATA)

Rashmi Jain[1], Rekha Parmar[2], Neeraj Kumar Jain[3]

[1]PG scholar, [2]Professor, Parul Institute of Ayurveda, Parul Univercity, Limda, Tal Waghodiya, Vadodara 391760,Gujrat, India. [3]Govt. National Homoeopathic Medical College and Hospital, Lucknow, Uttar Pradesh.

Abstract

Yoga is a way of life. Yoga is an old method of exercise that has developed over thousands of years in Indian society and has been practicing ever since. Yoga plays a great role in developing a sense of wellbeing in the person and produces a harmony between physical and mental levels. Parkinson's is a common neurodegenerative disorder mainly caused by progressive damage to the brain. The condition shows symptoms of spontaneous shaking of body parts decelerating movement and stiffness in muscles. People suffering from Parkinson's also experience depression and anxiety. They experience loss of balance, sleep and memory. Mostly people suffering from this disorder often end up being teased and stigmatized. In certain cases this results in aggravating the problem. Classical yoga provides an alternative method to manage Parkinson's symptoms. *Yoga Pranayama*, *Yogendra Aasanas* and *Kriyas* with regular training showed enhanced motor scores and developed gait parameters. Thus, yoga enhances muscles mobility, balance and lower extremity functions and stimulates nerve cells for better functioning. In this way, yoga practice develops physical and psychological stamina. Thus, help in improving the concentration and removes fear from the mind of patient.

Received- 11/09/2022
Revised- 15/10/2022
Accepted– 19/10/2022

Key Word- Parkinson's disease, Anxiety, Stiffness, Yoga

Corresponding Author:- Rashmi Jain**,** PG scholar, Parul Institute of Ayurveda, Parul Univercity, Limda, Tal Waghodiya, Vadodara 391760,Gujrat, India.

INTRODUCTION

Parkinson's disease (PD) is a progressive neurodegenerative disorder, prevalent in 1% of all individuals over the age of 60 years.[1] Although considered a multi neurotransmitter system disorder, the cardinal PD pathology is damage to the dopamine producing cells in the substantia nigra. Dopamine acts as a messenger between the parts of the brain and nervous

system that help control and co-ordinate body movements. If these nerve cells die or become damaged, the amount of dopamine in the brain is reduced so the part of the brain controlling movement cannot work as well as normal, causing movements to become slow and abnormal. The loss of nerve cells is a slow process. The symptoms of Parkinson's disease usually only start to develop when around 80% of the nerve cells in the substantia nigra have been lost.

- Symptoms of Parkinson's disease, can be
  - Motor symptoms, meaning that they relate to movement. They are:- limb rigidity ,bradykinesia, or slow movement ,Tremor ,balance and gait problems. Muscles cramps and dystonia, Falls and dizziness.
  - Non-motor symptoms, which do not relate to movement. They are :- Fatiuge, Hallucination, Sleep problems, Memory problems, Depression. Anxiety, Cognitive challenges, Felling tounge tied.

Yoga is a way of life. Classical Yoga provides an alternative method to manage ***Parkinson's*** symptoms. Several types of research confirmed that the individualised progress in Yoga postures with regular training showed enhanced motor scores and developed gait parameters.Yoga enhances muscle mobility, balance and lower-extremity functions.***Yoga therapy for Parkinson's*** management can be very recuperative and rejuvenating. Some Asanas are following :-

TADASANA

- This standing pose can help improve balance and posture. It helps strengthen the thighs, knees, and ankles.
- It can also help ease sciatic pain.
- Muscles worked :-
  1. Quadriceps
  2. Obliques
  3. Rectus abdominis
  4. Transversus abdominis

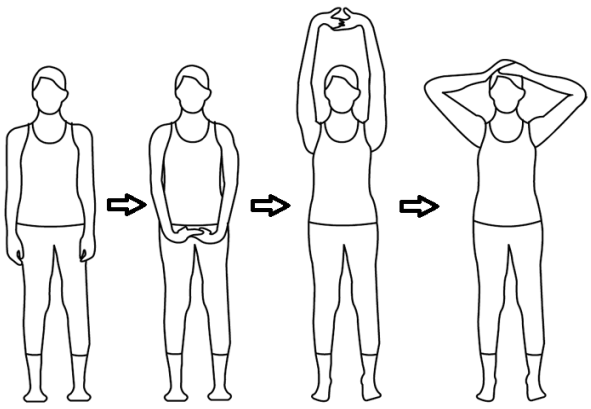

Fig 1 Tadasan

VRIKSHASANA

- This is a classic balancing pose.
- It helps strengthen your ankles, legs, and spine while stretching your thighs, chest, and shoulders. This can help improve your

balance while also relieving sciatic pain.

- Muscles worked :-
    1. Rectus and transversus abdominis
    2. Adductor longus
    3. Iliacus
    4. Quadriceps
    5. Hamstrings

Fig 2 Vrikshasana

VIRABHADRASANA

- This is a classic standing pose. It helps strengthen your legs and ankles while increasing your stamina.
- It's a great way to stretch your chest, shoulders, and groin.
- Muscles worked :-
    1. Quadriceps
    2. Thigh adductors
    3. Deltoids

Fig no. 3

UTTANASANA

- This calming posture helps strengthen your legs, knees, and hips.
- Because of its meditative nature, this pose is also thought to help ease stress and anxiety.
- Muscles worked :-
    1. Spinal muscles
    2. Piriformis
    3. Hamstrings
    4. Gastrocnemius
    5. Gracilis

Fig 4

E-ISSN: 2581-8899, P-ISSN: 2581-978X

SALABHASANA

- This gentle backbend can help strengthen your upper body, spine, and thighs.
- It stimulates the abdominal organs, which can help ease indigestion, flatulence, and constipation.
- Muscles worked :-
    1. Trapezius
    2. Erector spinae
    3. Gluteus maximus
    4. Triceps

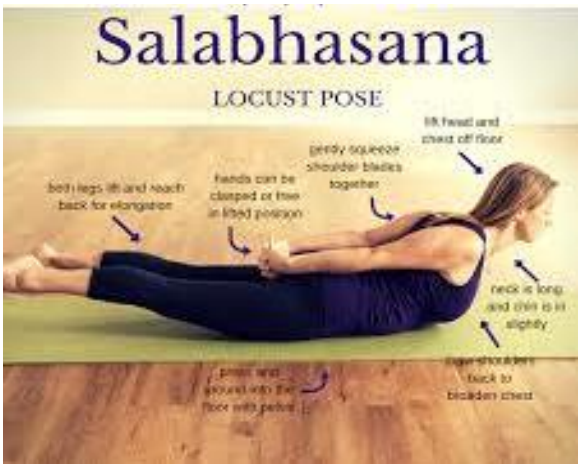

Fig no. 4 Salabhasana

BALASANA

- This restorative forward bend is an excellent resting pose. It gently stretches the hips, thighs, and ankles to help relieve tension and pain in the back.
- It also helps calm the mind, relieving stress and fatigue.
- Muscles worked :-
    1. Spinal extensors
    2. Hamstrings
    3. Tibialis anterior
    4. Trapezius

Fig no. 5 Balasana

Anulom-Vilom

- A breathing exercise that requires you to breathe in through one nostril, and breathe out through the other.
- It helps in managing symptoms of Parkinson's.
- Breathing exercises calm down the mind and the body and make it easier to keep anxiety and depression at bay.
- Taking deep breaths also makes the blood flow better and may help in keeping tremors away.

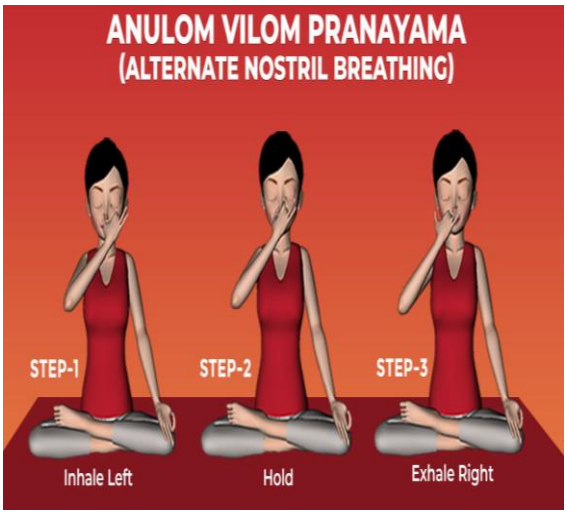

Fig No. 6 Anulom Vilom

The Benefit Of *Yoga Therapy For Parkinson's* Include-

- Increase motor functions, muscle flexibility and increased range of motion
- The circulatory system is benefits
- Enhances positive emotions
- Improves alertness of mind and memory
- Have better balance
- Awareness of their gait and less prone to shuffling their feet
- Relief from symptoms such as rigidity and fatigue
- Improvement in quality of life
- Decreasing the fear of falling and risk for injury
- Cultivating the ability to engage better in everyday tasks
- Increasing the opportunity to socialise and interact with others

Discussion

- Specific improvement in the sit-to-stand ability following yoga indicated an improved functional mobility and lower-limb strength.[2]
- Improvements in balance confidence that accompany, so yoga also contributed to reduced fear of falling in PD.[3]
- Utilization of more muscle fibers, especially during Vrikshasanas , produces more force per unit of mass; this causes peripheral changes and improved muscular endurance so gains in the lower extremity strength and improved postural stability and gait in PD.
- Since rigidity is a common clinical manifestation in PD so an improved upper and lower body flexibility have seen by doing Yogasanas.[4]

CONCLUSION

- Yoga may represent a particularly promising nonpharmacologic therapy for PD.
- By doing these yogaasanas improving mobility, balance, and lower-extremity function, so they also reduced the fear of falling and declines in strength and flexibility related to inactivity.[5]
- Upper-body flexibility supported postural stability and improved function during daily living activities

- These Yoga Aasanas have demonstrated improvements in stress, mood, fatigue, sleep, pain, mobility, problem solving and memory.
- The additional psychosocial benefits associated with yoga are also important to disease management and to the QoL in persons with PD, as they are often not addressed with conventional dopaminergic therapy. Boulgarides, et al., in a pilot study identified the outcome measures responsive to change in individuals with PD after an 8-week adaptive yoga program and found out depression subscale of the Hospital Anxiety and Depression Scale (HADS), 30-Second Chair Stand (TSCS), Single-Leg Balance test (SLB), and the right and left Sitand-Reach Test (SRT) changed as outcome measures. They concluded that adaptive yoga can be very helpful in patients with PD.[6]
- Shin, et al., used a selfadministered, cross-sectional survey and found out 2/3rd of paricipants used complementary health approaches like yoga, massage etc. either for general health measures or controlling quality of life in patients with PD .[7]
- Recently a case-control study reported that participants who completed a twice-weekly 12-week yoga intervention reported high levels of enjoyment. Yoga as an intervention showed improvement in balance l in people with PD .[8]
- Walter, et al., examined changes in nonmotor symptoms among individuals with PD following an 8-week yoga intervention. They found out yoga to be an efficacious intervention for improving nonmotor symptoms as well as HRQOL[9,10,11].

REFRENCES

1. De Lau LM, Breteler MM. Epidemiology of Parkinson's disease. *Lancet Neurol*. 2006;5(6):525–535.
2. Tiedemann A, Shimada H, Sherrington C, Murray S, Lord S. The comparative ability of eight functional mobility tests for predicting falls in community-dwelling older people. Age Ageing. 2008;37(4): 430–435.
3. Taylor M. Yoga therapeutics in neurological physical therapy: application to a patient with Parkinson's disease. *Journal of Neurologic Physical Therapy*. 2001;25(2):55–62.
4. Tran MD, Holly RG, Lashbrook J, Amsterdam EA. Effects of Hatha Yoga Practice on the Health-Related Aspects of Physical Fitness. *Prev Cardiol*. 2001;4(4):165–170.

5. Lee L. The effect of yoga exercises on balance, lower-extremity function and gait in people with Parkinson's disease. *Arch Physical Med Rehabil*. 2006;87(11):E19. Available from: http://www.archives-pmr.org/article/S0003-9993(06)01010-0/fulltext. Accessed on December 6, 2013.
6. Boulgarides LK, Barakatt E, Coleman-Salgado B. Measuring the eff ect of an eight-week adaptive yoga program on the physical and psychological status of individuals with Parkinson's disease. A pilot study. Int J Yoga Therap. 2014; 24: 31–41. PubMed: https://www.ncbi.nlm.nih.gov/pubmed/25858649
7. Shin JY, Pohlig RT, Habermann B. Use of Complementary Health Approaches in Individuals With Parkinson's Disease. J Gerontol Nurs. 2017; 43: 46–54. PubMed: https://www.ncbi.nlm.nih.gov/pubmed/27845808
8. Myers PS, Harrison EC, Rawson KS, Horin AP, Sutter EN, et al. Yoga Improves Balance and Low-Back Pain, but Not Anxiety, in People with Parkinson's Disease. Int J Yoga Therap. 2019. PubMed: https://www.ncbi.nlm.nih.gov/pubmed/31584838
9. Walter AA, Adams EV, Van Puymbroeck M,et al. Changes in Nonmotor Symptoms Following an 8-Week Yoga Intervention for People with Parkinson's Disease. Int J Yoga Therap. 2019; 29: 91–99. PubMed: https://www.ncbi.nlm.nih.gov/pubmed/30901529
10. Donley S, McGregor S, Wielinski C, Nance M. Use and perceived eff ectiveness of complementary therapies in Parkinson's disease. Parkinsonism Relat Disord. 2019; 58: 46–49. PubMed: https://www.ncbi.nlm.nih.gov/pubmed/30245174
11. https://www.ncbi.nlm.nih.gov/pubmed/28805568.

How to Cite this Article- Jain R., Parmar R., Jain N K., Role Of Yogic Management In Parkinson's Disease. TUJ. Homo & Medi. Sci. 2022;5(3):76-82.

Conflict of Interest: None **Source of Support: Nil**