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RESEARCH ARTICLE

A CURRENT TREND IN THE SCENARIO OF MANAGEMENT OF MAJOR JOINT DISORDER ARTHRITIS WITH YOGA.

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Abstract

The early diagnosis and treatment of nascent rheumatoid arthritis (RA) has become a prime objective for clinicians who substantially and sensitively care for patients with arthritis. Many Population-based studies have consistently shown that patients with RA are at substantial risk for progressive joint damage, disability, and increased morbidity and mortality. These inevitable outcomes are closely linked to the consequences of rheumatoid inflammation, which begins early and is progressive in all. A growing body of evidence has emphasized the consistent clinical and radiographic benefits of early, aggressive treatment of RA. Earlier identification, referral, and an accurate diagnosis of RA can now be rewarded with highly effective biological therapies. The aim of this article is to systematically review the existing literature on the use of yoga and its extensive benefits for persons with arthritis. Inclusion of peer-reviewed research from clinical trials within and outside India, that used yoga as an intervention for arthritis patients and reported quantitative findings are the main motive of the current review paper. All trials were small comprising of low patients registrations from the total pool of arthritic group and no adverse events were reported and attrition was comparable or better than typical for exercise interventions. Such work will further helpful in findings of yoga in attenuating the possible complications related to arthritis in large scale studies

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Introduction:-

Yoga includes a variety of theories and practices that originated in ancient India and have evolved and spread throughout the world. In Sanskrit, yoga means “to yoke” or connect. After attention to posture, deep breathing and/or chanting, yoga practice often begins with a slow movement sequence to increase blood flow and warm muscles. [1,2] This is followed by poses that include flexion, extension, adduction, abduction and rotation. [3,4] Holding poses builds strength by engaging muscles in isometric contraction. [5,6] Moving joints through their full range of motion increases flexibility, while standing poses promote balance by strengthening stabilizing muscles and improving proprioception to reduce falls. [7,8] Thus, yoga incorporates several elements of exercise that may be beneficial for arthritis. [9] To cope with pain, arthritis patients often reduce activity. [10,11] However, inactivity can

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result in muscle or tendon shortening, articular capsule contraction and weakened ligaments. [12] Conversely, regular activity may decrease pain and preserve stability. [13,14] While there was once concern that exercise might increase inflammation and exacerbate pain, regular physical activity is now recommended as part of comprehensive treatment of arthritis [15 -18]. The American College of Rheumatology (ACR) [19], Osteoarthritis Research Society International (OARSI) [20] and the Ottawa Panel [21] note that stretching, strengthening and conditioning exercises can preserve physical function, increase strength and improve endurance for people with arthritis. All persons with arthritis should consult with their doctor to determine a safe and appropriate approach to increasing physical activity. Unfortunately, long term exercise maintenance is uncommon even for healthy individuals generally approaching 50% after six months. [22] Vigorous exercise is ideal for physical health and may be acceptable for some persons with arthritis, but could be intolerable and may not be recommended for those with significant joint instability or damage [23, 24] . Adherence to moderate intensity exercise is more broadly tolerable, but still not attained by the majority of those with arthritis. For arthritis patients, emphasis on stretching and strength, posture, balance and the ability to adjust pace and intensity are important components of a safe activity, all of which yoga encompasses. Yoga may offer an alternative to traditional exercise and potential psychological benefits or increased enjoyment for enhanced exercise adherence. Yoga could, therefore, provide another way for arthritis patients to be active and engaged in health-promoting behavior. Mind-body interventions such as yoga that teach stress management with physical activity may affect diseases from multiple fronts and may be well-suited for investigation in both OA and inflammatory immune-mediated diseases such as RA. The goal of this review is to evaluate existing evidence regarding the effects of yoga practice on clinical, functional and psychosocial outcomes for people with arthritis.

Having arthritis should not prevent individuals from trying these alternatives to traditional exercise. However, for many people, yoga, may bring to mind pretzel-like poses requiring considerable strength and balance. In reality, beginner yoga classes may provide simple, gentle movements that gradually build strength, balance, and flexibility – all elements that may be especially beneficial for people with arthritis. Yoga is a set of theories and practices with origins in ancient India. Literally, the word yoga comes from a Sanskrit work meaning “to yoke” or “to unite.” It focuses on unifying the mind, body, and spirit, and fostering a greater feeling connection between the individual and his/her surroundings. As interest in yoga has increased in western countries over the last few decades, yoga postures are increasingly practiced devoid of their original spiritual context, solely for physical health benefits. This physical practice of yoga, often called Hatha Yoga, sometimes overlaps or includes references to the other aspects of yoga. A popular misconception is that yoga focuses merely on increasing flexibility. The practice of Hatha Yoga also emphasizes postural alignment, strength, endurance and balance, and incorporates breathing practices, as well as techniques such as relaxation or meditation.

Arthritis Management with Yoga:-

Physical activity is an essential part of the effective treatment of osteoarthritis (OA) and Rheumatoid Arthritis (RA), according to treatment guidelines published by the American College of Rheumatology. In persons with osteoarthritis, exercise is safe and does not exacerbate pain or worsen disease. [25] In fact, exercise may play a key role in promoting joint health, since those who do not exercise often suffer more joint discomfort than those who do. The health and psychological benefits of exercise are widely recognized. However, regular physical activity is especially important for people with arthritis, who often have decreased muscle strength, physical energy, and endurance, in part due to their arthritis and the tendency to be sedentary. [26] Being sedentary can begin a downward spiral where pain increases, leading to more inactivity which leads to greater pain and disability. The psychological benefits of exercise such as stress reduction, fewer depressive symptoms, improved coping and well-being and enhanced immune functioning also contribute to greater overall health. [27] Early studies showed promising results with some improvements in joint health, physical functioning, and mental/emotional well-being. [28-30] Yoga has an important positive effect on quality of life. People with arthritis may also enjoy yoga more than traditional forms of exercise, and exercise enjoyment is an important predictor of adherence. This is particularly important considering that, on average, 50% of sedentary individuals will drop out of exercise within 6 months. [31,32] Most importantly, a review of yoga studies has shown that serious injuries are rare if practiced under the guidance of certified instructors with avoidance of extreme positions. [33,34]

The poses that were used in the study included gentle forward bends, backbends, twists, balances, standing, sitting and lying poses. These poses were modified based on concerns for the individual participant. Blocks, straps, blankets, and chairs were used as props to modify poses. The intensity poses and intensity was standardized to allow gradual progression. During the whole yogic management schedule patients must be advised to keep their medication and its dosage pattern constant without any major variations.

Precautions to be taken during Yogic kriya for arthritic patients:-

The general rule for arthritis patient (and people in general) is that if it hurts, stop. The old adage of “no pain, no gain” does not apply to yoga, particularly if you have activity limitations. When doing backbends, arthritis patients should keep them relatively small and be aware not to hyper-extend the neck, keeping the head in line with the rest of the spine. For those with arthritis of the hip, be cautious when doing “hip openers” or poses with extreme external rotation of the hips. Generally, you will notice pain if you are going too far with the pose, but sometimes the effects are not felt until the next day. It is important to be gentle with your practice, especially at first. If you do not experience any pain after a few days, you can decide to gradually increase the intensity of the poses. There have also been some indications that strength training targeted at the quadriceps muscles might not be recommended for those with misaligned or lax knees. However, interventions that balance opposite muscle groups and exercises that improve muscle awareness (such as yoga) might help stabilize the knee. As with any condition, it is important to be cautious and pay attention to your body. Also, be sure to consult your doctor and instructor if you experience any pain or difficulty resulting from yoga practice.

Questionnaires:-

Does Yogasan help in the Cure Joint Problems especially Arthritis?

At the initial stage of most varieties of Joint Problems especially in Arthritis, Asanas & Pranayam help to get Complete relief, but older the disease, longer the time it takes to bring out relief.

What is the co-relation of food with practice of Yoga on the Joint Problems?

Ans : Persons suffering from Joint disease have to be very cautious and selective in their choice of food. From the view of Yoga, it is good to avoid bananas, curd and butter milk. Fruits like oranges, apples, sprouts, salads, Green vegetables & edible herbs are to be taken in optimum quantities. It is best to take your food an hour before you go to bed.

What type of life style is advised for preventing Arthritis?

Ans : Avoid using the direct wind from fan too much. It is advisable not to use the air-conditioner, not to move in the cold nor Bathe in very cold water. Cleanliness is very essential.

Why does neck pain occurs according to Yoga?

Ans : Neck pain may be due to a condition called as cervical spondylosis in modern medicine. There is excruciating pain at the middle of the neck, the two shoulder joints, two arms and the back. These spasms are either constant or periodic. Use of high and hard pillows remaining in some awkward position for a long time and injury are some of the factors responsible for neck pain.

Q.5.What are the Yogasans for arthritis and its related complications?

Ans : For relief of these problems, there are certain Asanas, Pranayams, Mudras and Kriya.

These are as follows

Sahaja Sukha Asana

1. Movement of hand and neck front and back/left and right --- 5 times each.
2. Movement of elbows front and back --- 5 times each.
3. Thrusting of fingers forwards and backwards --- 5 times each.
4. Circling of neck clockwise and anti-clockwise --- 5 times.
5. Thrusting of feet forwards and backwards and circling both clockwise and anti- clockwise ---10 times each.
6. Circling the knees --- 10 times.
7. Circling of ankles clockwise and anti-clockwise --- 50 times.
8. Walking on toes forwards and backwards --- 5 times.
9. Singha Mudra --- 3 times.
10. Savasana --- 5 minutes.
11. Pavan Mukta Asana, stretch lumber --- 5 times.
12. Leg raising --- 5 times.
13. Dorsal stretch once --- 1 Minute.
14. Sasanka Asan --- 5 minutes.
15. Deep Yoga Nindra --- 2 minutes.
16. Tiger Breathing --- 20 times.
17. Swana Swasa Kriya --- 50 times.

Table No.1:- Various proposed yogic techniques by different acharyas for the management of arthritis out of which some are only recommended:

STYLE	FOUNDER	CHARACTERISTICS	RECOMMENDATION FOR Arthritis *
Ananda	Swami Kriyananda	Very gentle. Preparation for meditation. Directing of energy. Affirmations combined with poses.	Longer meditation may be difficult for arthritis patients
Anusara	John Friend (student of B.K.S. Iyengar)	Anatomically-based. Emphasis on opening the heart. Extensive teacher training.	Recommended for most arthritis patients.*
Ashtanga	K. Pattabhi Jois (student of Sri T. Krishnamacharya)	Specific sequence. Continuous movement. Very strenuous.	Not recommended for arthritis patients due to physical rigor.
Bikram/Hot	Bikram Choudhury	Taught in 100-110 degree room to expel toxins and increase mobility.	Not recommended for arthritis patients due to extreme heat.
Integral	Swami Satchidananda (student of Swami Sivananda)	Gentle practice including poses, breathing, chants, and meditation.	Recommended for most arthritis patients.*
Iyengar	B.K.S. Iyengar (student of Sri T. Krishnamacharya)	Strong anatomical basis. Uses props to individualize poses.	Recommended for most arthritis patients.*
Kripalu	Amrit Desai	Taught in three stages with evolving emphasis. Stage One focus on learning poses and understanding body.	First stage recommended for most arthritis patients.*
Kundalini	Yogi Bhajan	Intended to awaken latent spiritual energy through poses, breathing, meditation.	Intensity of breathing techniques may be challenging for some patients.
Sivananda	Swami Vishnudevananda (student of Swami Sivananda)	Gentle practice including poses, breathing, chants, and meditation.	Recommended for arthritis patients.
Viniyoga	Sri. T. Krishnamacharya	Individualized practice. Breath and movement very coordinated. Extensive teacher training.	Recommended in private sessions for most arthritis patients.*

Conclusion and Summary:-

yoga can be a meaningful and enjoyable alternative to traditional forms of exercise such as aerobics or aquatic exercise with important health benefits. Yoga can play an important role in **reducing stress and frustration** that results from pain and disability, **and increasing positive feelings and wellbeing**. Drug treatments for OA and RA have improved markedly in the last few years. Despite this, arthritis cannot be cured, and even the best medications and medical care have many limitations. There is a great need for additional activities patients can do to reduce pain, disability, and take control of the overall impact arthritis may have on their lives. Thus, the evidence suggests that, when combined with a program of good medical care, yoga may provide important additional physical and psychological health benefits for arthritis patients.

References:-

1. Jeter PE, Slutsky J, Singh N, Khalsa SBS. Yoga as a Therapeutic Intervention: A Bibliometric Analysis of Published Research Studies from 1967 to 2013. *J Altern Complement Med.* 2015;21(10):586-592. doi:10.1089/acm.2015.0057.
2. Moonaz SH, Bingham CO, Wissow L, Bartlett SJ. Yoga in Sedentary Adults with Arthritis: Effects of a Randomized Controlled Pragmatic Trial. *J Rheumatol.* 2015;42(7):1194-1202. doi:10.3899/jrheum.141129.
3. Madanmohan, Thombre DP, Balakumar B, et al. Effect of yoga training on reaction time, respiratory endurance and muscle strength. *Indian J Physiol Pharmacol.* 1992;36(4):229-233. <http://www.ncbi.nlm.nih.gov/pubmed/1291472>. Accessed March 21, 2018.
4. Schell FJ, Allolio B, Schonecke OW. Physiological and psychological effects of Hatha-Yoga exercise in healthy women. *Int J Psychosom.* 1994;41(1-4):46-52. <http://www.ncbi.nlm.nih.gov/pubmed/7843867>. Accessed March 21, 2018.
5. Gauchard GC, Jeandel C, Tessier A, Perrin PP. Beneficial effect of proprioceptive physical activities on balance control in elderly human subjects. *Neurosci Lett.* 1999;273(2):81-84. <http://www.ncbi.nlm.nih.gov/pubmed/10505621>. Accessed March 21, 2018.
6. Miller JJ, Fletcher K, Kabat-Zinn J. Three-year follow-up and clinical implications of a mindfulness meditation-based stress reduction intervention in the treatment of anxiety disorders. *Gen Hosp Psychiatry.* 1995;17(3):192-200. <http://www.ncbi.nlm.nih.gov/pubmed/7649463>. Accessed March 21, 2018.
7. Wood C. Mood change and perceptions of vitality: a comparison of the effects of relaxation, visualization and yoga. *J R Soc Med.* 1993;86(5):254-258. <http://www.ncbi.nlm.nih.gov/pubmed/8505745>. Accessed March 21, 2018.
8. Pascoe MC, Bauer IE. A systematic review of randomised control trials on the effects of yoga on stress measures and mood. *J Psychiatr Res.* 2015;68:270-282. doi:10.1016/j.jpsychires.2015.07.013.
9. Floden BA. Physical Activity , Exercise Can Benefit Patients with RA. *Rheumatol.* 2018:1-10.
10. Hochberg MC, Altman RD, April KT, et al. American College of Rheumatology 2012 recommendations for the use of nonpharmacologic and pharmacologic therapies in osteoarthritis of the hand, hip, and knee. *Arthritis Care Res (Hoboken).* 2012;64(4):465-474. <http://www.ncbi.nlm.nih.gov/pubmed/22563589>. Accessed March 21, 2018.
11. Coates LC, Fransen J, Helliwell PS. Defining minimal disease activity in psoriatic arthritis: a proposed objective target for treatment. *Ann Rheum Dis.* 2010;69(1):48-53. doi:10.1136/ard.2008.102053.
12. Fransen M, McConnell S, Hernandez-Molina G, Reichenbach S. Exercise for osteoarthritis of the hip. *Cochrane Database Syst Rev.* 2014;(4):CD007912. doi:10.1002/14651858.CD007912.pub2.
13. Østerås N, Kjekken I, Smedslund G, et al. Exercise for hand osteoarthritis. *Cochrane Database Syst Rev.* 2017;1:CD010388. doi:10.1002/14651858.CD010388.pub2.
14. Bennell KL, Dobson F, Hinman RS. Exercise in osteoarthritis: Moving from prescription to adherence. *Best Pract Res Clin Rheumatol.* 2014;28(1):93-117. doi:10.1016/j.berh.2014.01.009.
15. Hurkmans E, van der Giesen FJ, Vliet Vlieland TP, Schoones J, Van den Ende EC. Dynamic exercise programs (aerobic capacity and/or muscle strength training) in patients with rheumatoid arthritis. *Cochrane Database Syst Rev.* 2009;(4):CD006853. doi:10.1002/14651858.CD006853.pub2.
16. Iversen MD, Brandenstein JS. Do Dynamic Strengthening and Aerobic Capacity Exercises Reduce Pain and Improve Functional Outcomes and Strength in People With Established Rheumatoid Arthritis? *Phys Ther.* 2012;92(10):1251-1257. doi:10.2522/ptj.20110440.
17. HASKELL WL, LEE I-M, PATE RR, et al. Physical Activity and Public Health. *Med Sci Sport Exerc.* 2007;39(8):1423-1434. doi:10.1249/mss.0b013e3180616b27.
18. Lyngberg K, Danneskiold-Samsøe B, Halskov O. The effect of physical training on patients with rheumatoid arthritis: changes in disease activity, muscle strength and aerobic capacity. A clinically controlled minimized cross-over study. *Clin Exp Rheumatol.* 6(3):253-260. <http://www.ncbi.nlm.nih.gov/pubmed/3052971>. Accessed March 21, 2018.
19. Law R-J, Breslin A, Oliver EJ, et al. Perceptions of the effects of exercise on joint health in rheumatoid arthritis patients. *Rheumatology.* 2010;49(12):2444-2451. doi:10.1093/rheumatology/keq299.
20. Scarvell J, Elkins MR. Aerobic exercise is beneficial for people with rheumatoid arthritis. *Br J Sports Med.* 2011;45(12):1008-1009. doi:10.1136/bjsports-2011-090388.
21. Fox KR. The influence of physical activity on mental well-being. *Public Health Nutr.* 1999;2(3A):411-418. <http://www.ncbi.nlm.nih.gov/pubmed/10610081>. Accessed March 21, 2018.

22. Saeed SA, Antonacci DJ, Bloch RM. Exercise, yoga, and meditation for depressive and anxiety disorders. *Am Fam Physician*. 2010;81(8):981-986. <http://www.ncbi.nlm.nih.gov/pubmed/20387774>. Accessed March 21, 2018.
23. Scully D, Kremer J, Meade MM, Graham R, Dudgeon K. Physical exercise and psychological well being: a critical review. *Br J Sports Med*. 1998;32(2):111-120. <http://www.ncbi.nlm.nih.gov/pubmed/9631216>. Accessed March 21, 2018.
24. Carek PJ, Laibstain SE, Carek SM. Exercise for the Treatment of Depression and Anxiety. *Int J Psychiatry Med*. 2011;41(1):15-28. doi:10.2190/PM.41.1.c.
25. Kaplan MS, Huguet N, Newsom JT, McFarland BH. Characteristics of physically inactive older adults with arthritis: results of a population-based study. *Prev Med* 2003;37(1):61–67. [PubMed:12799130]
26. Blumstein H, Gorevic PD. Rheumatologic illnesses: treatment strategies for older adults. *Geriatrics* 2005;60(6):28–35. [PubMed: 15948663]
27. Ottawa Panel evidence-based clinical practice guidelines for therapeutic exercises in the management of rheumatoid arthritis in adults. *Phys Ther* 2004;84(10):934–972. [PubMed:15449978]
28. Buckwalter JA, Lane NE. Athletics and osteoarthritis. *Am J Sports Med* 1997;25(6):873–881. [PubMed: 9397280]
29. Minor MA, Lane NE. Recreational exercise in arthritis. *Rheum Dis Clin North Am* 1996;22(3): 563–577. [PubMed: 8844914]
30. Farr JN, Going SB, Lohman TG, Rankin L, Kasle S, Cornett M, et al. Physical activity levels in patients with early knee osteoarthritis measured by accelerometry. *Arthritis Rheum* 2008;59(9): 1229–1236. [PubMed: 18759320]
31. Garfinkel MS, Schumacher HR Jr, Husain A, Levy M, Reshetar RA. Evaluation of a yoga based regimen for treatment of osteoarthritis of the hands. *J Rheumatol* 1994;21(12):2341–2343.[PubMed: 7699639]
32. Haaz S, Bathon J, Bartlett S. Initial Findings of an RCT of Yoga on Physical and Psychological Functioning in RA and OA. *Arthritis and Rheumatism Supplement*. 2007