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## A CASE STUDY OF CHRONIC OBSTRUCTIVE PULMONARY DISEASE (COPD) THROUGH COPD ASSESSMENT TEST (CAT)-QUESTIONNAIRE AND HOMOEOPATHIC MEDICINES ALONG WITH YOGIC INTERVENTION

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### Abstract

Chronic Obstructive Pulmonary Disease (COPD) is a respiratory condition characterized by progressive airflow limitation and chronic inflammation of lungs. Conventional treatment has shown varying degrees of success, prompting an exploration of alternative approaches which could be Complementary Alternative Medicine that may include Homoeopathy & Yoga etc. **Aim and objectives:** This study aims to investigate the effectiveness of homeopathic intervention and yoga practices in improving the health outcomes of indoor COPD patients admitted at Dr. B R Sur Homoeopathic Medical College, Hospital & Research centre (SHMC & Hospital). **Method:** An observational study conducted on COPD patient admitted in In-patient department of SHMC and Hospital. A key outcome measure was done through COPD Assessment Test (CAT) questionnaire. Data analysis was done on Microsoft excel and the graphical representation of pre and post score shows a significant improvement in the case of COPD. **Result:** The findings from this study have the potential to contribute valuable information to the existing body of knowledge on alternative therapies for COPD. **Conclusion:** Understanding the role of homeopathic medicines along with yoga techniques in managing COPD would lead to more comprehensive and personalized treatment approaches, ultimately enhancing the improvement in breathing related difficulties that impact the quality of life of individuals living with this chronic respiratory condition.

**Key Words:** COPD, CAT Score, Homeopathic medicines and Yoga techniques.

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## INTRODUCTION

Chronic Obstructive Pulmonary Disease (COPD) is a progressive lung condition characterized by obstructed airflow. It primarily includes chronic bronchitis and emphysema. It is usually caused by long-term exposure to irritants like smoking or environmental pollutants. Clinical features of Chronic Obstructive Pulmonary Disease (COPD) often present with symptoms like shortness of breath, chronic cough, wheezing, and Chest tightness. COPD can significantly impact on lung function and quality of life. Treatment involves lifestyle changes, medications, and sometimes supplemental oxygen therapy. The diagnosis involves medical history, lung function tests (spirometry), imaging (chest X-rays or CT scans), and pulse oximetry to assess oxygen levels. If one suspects COPD, it's important to consult a healthcare professional for accurate diagnosis and management. Findings of the study (1) indicate that integrated approach of Homoeopathy and Yoga therapy benefits COPD, thereby reducing dyspnoea, fatigue and Pulse rate, and improving functional performance. Yoga can be included as an adjuvant to conventional therapy for pulmonary rehabilitation programs for COPD patients (2).

**Aim & objective of the case study:** The aim of this case study was to find out the effectiveness of Homeopathic medicines and 30-minute breathing techniques on indoor patient of COPD admitted to SHMC and Hospital with an objective to analyse the effect of 30-minute Yogic breathing technique as an adjunct treatment for medically stable individuals with moderate to severe cases of COPD.

**Methodology:** This was a Questionnaire-based Observational study for 6 weeks was done at inpatient department of Dr. B. R. Sur Homeopathic Medical College, Hospital and Research Centre. The outcome measure tools taken were COPD assessment test (CAT) score after intervention with homeopathic individualised medicines along with 30-minute Yogic breathing technique.

**Case details-** A 73-year male (clinically diagnosed case of COPD) was admitted in IPD of SHMC & Hospital with the complaints of breathlessness < walking, exertion, cough with

expectoration <morning and in winter, there was thick creamy expectoration, watery discharge from nose, on auscultation wheezing on left lower lobe was heard, there was grade 4 dyspnoea for 5 days. He was a diagnosed case of COPD for 5 years. After proper case taking and analysis, according to homeopathic case management principles sulphur 200, Causticum 200, Aspidosperma Q, Lycopodium 200, Alfa alfa Q, Arsenic album 200, Gelsemium 30, Casuticum 1M, Carbo veg 30, Kali bi. 30 have been given symptomatically. Since it was a chronic disease & as per Hahnemannian guidelines series of different remedy were required. According to the MYMOP (Measure Yourself Medical Outcome Profile) analysis form, baseline scoring of symptoms was 5 and after treatment, it became 3 and on ORIDL (Outcome About Impact on Daily Living) assessment patient showed moderate improvement (+2) in his complaints. He was also given yogic techniques as per the developed yoga protocol for COPD. Homoeopathic medicines that were selected on the basis of symptoms for the treatment of the COPD case in hand are mentioned in the following Table-1

**Table-1**

| DATE       | SYMPTOMS/OBSERVATION   | MEDICINE  | JUSTIFICATION  |
|------------|--|---|--|
| 14/08/2023 | difficult breathing, < walking, increased respiratory rate i.e., 36 inspiration/ min | Aspidosperma Q/ 20gtt/TDS/1 day                               | Stimulates respiratory centre and increases the oxygen in blood                  |
| 15/08/2023 | watery discharge from nose < morning, coughing, cough with difficult expectoration   | Causticum 200/3 doses/ stat/1 day                             | Long lasting grief, sudden emotions, cough with scanty expectoration             |
| 16/08/2023 | Difficult breathing < walking with increased respiratory rate                        | Followed by sac lac 30/TDS/8 days, Aspidosperma Q/ 20 gtt/SOS | Patient's Complaints are improving, Aspidosperma Q stimulates respiratory centre |

|            |   |   |  |
|------------|---|---|--|
| 24/08/2024 | Burning in bilateral soles, burning pain in epigastric region > afternoon, <evening | Sulphur 200/1 dose/stat<br>Followed by sac lac 30/TDS/2 days      | As an intercurrent, sensation of burning                           |
| 27/08/2023 | wheezing on expiration,   | Lycopodium 200/3 doses/stat<br>Sac lac 30/TDS/1 day               | Follows well after Sulphur, respiration wheezing expiring while    |
| 28/08/2023 | Difficult breathing < morning, exertion   | Aspidosperma Q/20gtt/OD/ 2 days<br>Sac lac 30/TDS/2 days          | Patient is improving in general,                                   |
| 30/08/2023 | weakness, decreased appetite,   | Alfa alfa Q/20 gtt/BD/ 2 days<br>Aspidosperma Q/20 gtt/OD/10 days | General body weakness, weight loss, defective assimilation of food |
| 01/09/2023 | Cough on slightest exertion   | Carbo veg 30/TDS/2 days<br>Sac lac/30/TDS/2 days                  | >Fanning, must have all windows open, quicken respiration          |
| 03/09/2023 | Shortness of breath < lying down, fear of suffocation, must sit                     | Arsenic album 200/1 dose/stat<br>Sac lac/30/TDS/4 days            | General weakness, anxiety, restlessness                            |
| 07/09/2023 | Nasal discharge ropy < morning, expectoration sticky and gelatinous                 | Kali bi. 30/TDS/1 day<br>Sac lac/30/TDS/20 days                   | Ropy, stringy nasal discharge < morning                            |

**Yoga Protocol for COPD:** Yoga is an excellent form of exercise for anyone with COPD. The study of Malik and his colleagues of 2022 found that well-designed yogic protocol had significantly better choice for COPD cases than other exercises (9). Yoga protocol for COPD

case is designed based on literature review, which include Asanas, Pranayama, Relaxation techniques, Meditation, Yogic counseling for stress management, Chanting, and Lectures on yogic lifestyle and philosophy (6). It is designed for 30-minute daily practice for the total duration of 6 weeks. Protocol includes Udwashana/Makrasan (5-10 min), Pursed-Lips Breathing (5-10 min), Prana Mudra (10-20 min) and Om Chanting (3-times)

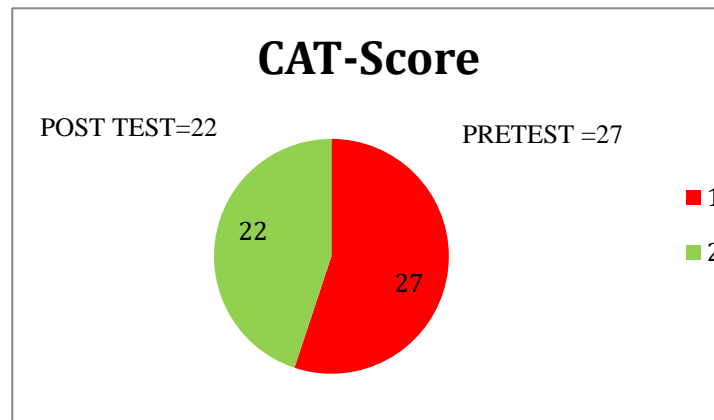
### **Administration, scoring and interpretation of COPD Assessment Test (CAT) before and after Yogic and Homeopathic intervention**

**Administration:** The CAT is a validated, short (8-item) and simple patient completed questionnaire, with good discriminate properties, developed for use in routine clinical practice to measure the health status of patients with COPD. Despite the small number of component items, it covers a broad range of effects of COPD on patients' health. Studies have shown that it is responsive to change and to treatment (1, 2 & 3).

**Table: 2 Showing CAT pre and post score**

| <b>Item No.</b>    | <b>CAT Pre-Score</b> | <b>CAT Post-Score</b> |
|--------------------|----------------------|-----------------------|
| 1                  | 4                    | 3                     |
| 2                  | 4                    | 3                     |
| 3                  | 0                    | 0                     |
| 4                  | 3                    | 2                     |
| 5                  | 3                    | 3                     |
| 6                  | 5                    | 3                     |
| 7                  | 3                    | 3                     |
| 8                  | 5                    | 5                     |
| <b>Total-Score</b> | <b>27</b>            | <b>22</b>             |

**Interpretation of the CAT-Score;** According to the interpretation table of the CAT-questionnaire it is found that higher the score higher the severity of the disease. As the total post CAT-score is noted to decrease from 27 to 22 which is inferred as a good change due to Homeopathic intervention and Yogic Management. A graphical representation of the pre and post score is shown in (fig-1).



**Fig-1 Graphical Representation of Pre & Post score of CAT.**

**Discussion:** Homeopathic intervention had significant role in the symptomatic improvements discussed in (Table-1). Homeopathic medicines like; *Aspidosperma*- Stimulates respiratory centre and increases the oxygen in blood. *Causticum*- for long lasting grief, sudden emotions, cough with scanty expectoration. *Sulphur*- As an inter-current, sensation of burning. *Lycopodium*- Follows well sulphur, respiration wheezing expiring while. *Alfa alfa*- General body weakness, weight loss, defective assimilation of food. *Carbo veg*- is indicated where the patient wants fanning, must have all windows open, quicken respiration. *Arsenic album*- is indicated for general weakness, anxiety, restlessness. *Kali bi* - is indicated for ropy, stringy nasal discharge (7 & 8).

Yoga intervention have shown improvements in anxiety and depression among patients with COPD (3). However, yoga considers mental well- being imperative irrespective of any underlying mood or mental disease. Apart from the physical activities that contribute to mindfulness, Yoga involves meditation and relaxation techniques. Each yoga session completes with meditation followed by prayers or affirmations for positive thinking for

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enhanced self- worth and stress regulation (4). The physiological changes attributable to meditation can be summarized as modulation of autonomic nervous tone and consequent reduction in sympathetic tone, activation of antagonistic neuromuscular systems, which may increase the relaxation response in the neuromuscular system, and stimulation of the limbic system primarily by meditation (5). The key contribution from yoga as a psychosomatic practice has ability for emotion regulation through physical activity, breathing and meditation, when practiced alongside PR can enhance the health- related quality of life of adults living with COPD. Yoga breathing techniques (Pranayama) can help instil a sense of control over breathing, potentially reducing dyspnoea and improve pulmonary functions.

**Conclusion:** The outcome of this case showed significant improvement in symptoms exhibited by the patient, like fatigue, dyspnoea etc, with Homoeopathy when supported with Yoga following yogic technique used in pulmonary rehabilitation programme.

**Conflict of Interest:** Nil

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## REFERENCES:

1. Ranjita R, Hankey A, Nagendra HR, Mohanty S. Yoga-based pulmonary rehabilitation for the management of dyspnea in coal miners with chronic obstructive pulmonary disease: a randomized controlled trial. *Journal of Ayurveda and integrative medicine*. 2016 Jul 1;7(3):158-66.
2. Raj N, Bhati D, Arya A. A Yoga-based pulmonary rehabilitation for the management of Chronic obstructive pulmonary disease: A Randomized controlled trial. *International Journal of Alternative and Complementary Medicine*. 2023 Apr 27:7-14.

3. Jones PW, Harding G, Berry P, Wiklund I, Chen WH, Leidy NK. Development and first validation of the COPD Assessment Test. *European Respiratory Journal*. 2009 Sep 1;34(3):648-54.
4. Gupta N, Pinto LM, Morogan A, Bourbeau J. The COPD assessment test: a systematic review. *European Respiratory Journal*. 2014 Oct 1;44(4):873-84.
5. Jones PW, Harding G, Wiklund I, Berry P, Tabberer M, Yu R, Leidy NK. Tests of the responsiveness of the Chronic Obstructive Pulmonary Disease (COPD) Assessment Test TM (CAT) following acute exacerbation and pulmonary rehabilitation. *Chest*. 2012 Jul;142(1):134-40.
6. Nagarathna R, Nagendra HR. Integrated approach of yoga therapy for positive health.
7. Desai, P. Dr. Uma Sahoo.
8. Kent, J. T. *Lectures on Homoeopathic Philosophy Reprint 4th edition B*. New Delhi: Jain Publisher.
9. Malik, S., Dua, R., Krishnan, A. S., Kumar, S., Kumar, S., Neyaz, O & Barnwal, S. L. (2022). Exercise capacity in patients with chronic obstructive pulmonary disease treated with tele-yoga versus tele-pulmonary rehabilitation: a pilot validation study. *Cureus*, 14(11)