Bulletin of Environment, Pharmacology and Life Sciences

Bull. Env. Pharmacol. Life Sci., Vol 12 [12] November 2023 : 414-418 ©2023 Academy for Environment and Life Sciences, India

Online ISSN 2277-1808

Journal's URL: http://www.bepls.com

CODEN: BEPLAD



OPEN ACCESS

REVIEW ARTICLE

A Case Study of Pediatric Asthma to Show the Efficacy of Individualized Homoeopathy in Decreasing the Dependence on Bronchodilators Using Asthma Control Questionnaire

Siddharth Saurabh1, Ketan Shah2

1Dept. of Repertory, Ahmedabad Homoeopathic Medical College, Ahmedabad ORCID Id - 0000-0002-5888-6540
2Dept. of Materia Medica, Ahmedabad Homoeopathic Medical College, Ahmedabad **Email-** drsiddharthagrawal@gmail.com

ABSTRACT

Asthma is one of the most common chronic conditions among children, impacting an estimated 7.5% of children and adolescents under 18 years of age worldwide. Conventional treatments often involve the use of bronchodilators and corticosteroids, which may provide temporary relief but fail to address the underlying causes. This case presentation explores the successful treatment of a pediatric patient with asthma using individualized homoeopathy. 10 yr old boy came with complaints of recurrent symptoms of breathlessness, coughing and wheezing. He is currently using short acting bronchodilators since last 7 months. After careful case taking considering his physical and mental symptoms and repertorisation, Arsenicum Album 30 was prescribed. His initial Asthma control Questionnaire (ACQ) score was 28. On subsequent follow ups Using the Asthma Control Questionnaire (ACQ) as an outcome measure, the study tracked symptomatic improvement and no bronchodilator usage over time. The study indicates the potential efficacy of homeopathy as a complementary approach in pediatric asthma management, warranting further investigation in controlled clinical studies.

 $\textbf{\textit{Keywords}:} \ Pediatric \ Asthma, Individualized \ Homoeopathy, Bronchodilators, Asthma \ Control \ Question naire$

Received 06.09.2023 Revised 21.10.2023 Accepted 29.11.2023

INTRODUCTION

Asthma is one of the most common chronic conditions among children, impacting an estimated 7.5% of children and adolescents under 18 years of age worldwide [1]. These patients frequently experience recurrent episodes of wheezing, coughing, shortness of breath, and chest tightness, which can lead to substantial impairments in their quality of life [2]. The standard care of pediatric asthma primarily involves the use of bronchodilators and corticosteroids [3]. However, these medications can pose potential side effects and may not fully control the symptoms or progression of the disease [4]. Consequently, many parents and caregivers are seeking alternative or complementary treatments, such as homeopathy [5]. Homeopathy, is system of medicine developed in the late 18th century, based on the principle of "like cures like" [6]. Individualized homeopathic treatment, a unique approach within homeopathy, involves individualized remedies to each patient based on their specific symptoms and overall health status [7].

Patient information

On 6th February 2023 a 10-year-old boy, came with his parents at Sainath Hospital OPD of Ahmedabad Homoeopathic Medical College, Parul university, with chief complaint of recurrent episodes of coughing, wheezing, and shortness of breath since the age of 5 year. The symptoms were particularly exacerbated during sleep after midnight, during damp weather and exposure to dust and strong smell. He is sensitive to cold air, cold food. The episodes were accompanied by chest tightness and frequent nocturnal awakening due to breathing difficulties. Child's parents reported various incidences of hospitalizations for asthma exacerbations in the past 2 years. At the time of consultation, child was on quick acting bronchodilators 2 to 3 times a day for the past 7 months, but with temporary relief only. Frequency of these inhalations had increased in the last 2 weeks. Moreover, complaints of nocturnal enuresis started since last 1 month. Due to worries about the long-term use of bronchodilators and a desire for a more holistic and customized approach, parents sought an alternate treatment strategy.

Past History

Five years before, the patient was identified as having asthma during a visit to the pediatrician for repeated episodes of coughing, wheezing, and shortness of breath.

Family History

Father had Bronchial asthma and epilepsy

Personal History

Patient had sickly, dull face, whitish complexioned and lean and thin. His hair seems dry and rough. he is mild and slightly nervous in nature. Parents reported that they are vegetarian and his appetite is decreased in last 2 weeks since attacks increased. he likes milk, and drinks lots of water daily. He complains of dullness and lethargy, and he feels exhaustion very easily.

Mind

Parents said that child is very nervous and fearful. He is lethargic and weak. Lack of concentration. During attacks of dyspnea, becomes very frightened and repeatedly asks 'weather something will happen to me.' Fear of dirt, Dust, germs as he feels it can aggravate his complaints. While approaching for auscultation he asked to sanitize the chest piece, as it may be used on someone else before.

Asthma control Questionnaire (ACQ) Score

ACQ score is used to assess the efficacy and outcome of treatment. It is simple questionnaire to measure the adequacy of asthma control and change in asthma control which occurs either spontaneously or as a result of treatment. ACQ was developed and validated by Prof. Elizabeth F. Juniper, MCSP, MSc. (8)

Initial score was 28; the score was taken on every subsequent follow-up to assess the outcome of the treatment. (Table 2)

Selection of Remedy

The case was repertorised using RADAR opus homoeopathic software with synthesis repertory [9], to find the similar group of remedies, after analysis and evaluation of symptoms.

Following symptoms were taken for the repertorisation to get group of remedies which are very similar to the patient's overall constitution.

- 1. Mild
- 2. Difficult concentration
- 3. Fear infection/germs
- 4. Anxiety something will bad happen
- 5. Fearful
- 6. Desire milk
- 7. Aggravation midnight after
- 8. Thirst for large quantities of water

Repertorisation gives the result as shown in figure 1. Following remedies were compared with the help of Materia medica for final selection of the remedy –

- Arsenicum Album
- Calcarea Carb
- Sulphur
- Carcinosin
- Natrum Mur
- Silicea
- Phosphorus

Arsenicum Album was selected with the following considerations and symptom similarity on consulting Materia medica –

- Fear fright and worry; Anxious [10,11]
- Cough worse after midnight. [10]
- Patient is extremely nervous [12]
- Face pale, Cachectic. hollow [10,13]
- Thirst for large quantities of cold water [10]
- Easy Exhaustion on exertion [13]

Arsenicum Album *30* single dose in 40 size globules with placebo in 40 size globules every 2 hourly was prescribed for 3 days. Parents were advised to continue bronchodilator inhalation if condition demands.

Fig.1 Repertorisation Chart

Follow -up: The patient was followed up regularly (Table 1)

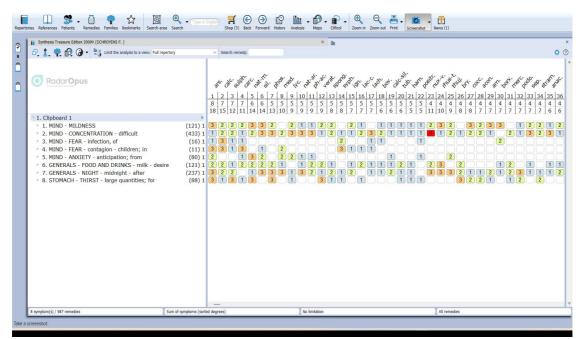


Table 1 - Follow-up

Follow – up No.	Date	Symptoms	ACQ score	Prescription		
1	09.02.2023	Symptoms of cough and breathlessness are very much relieved. After 2 days of first prescription, she took bronchodilator only once in a day.	18	Placebo in 40 size globules thrice a day for 7 days.		
2	16.02.2023	Episode of night time aggravation reduced, wheezing reduced significantly, occasionally taken bronchodilator.	14	Placebo in 40 size globules thrice a day for 15 days.		
3	02.03.2023	Condition is same in last 15 days, wheezing is still there, occasional use of bronchodilators.	16	Arsenicum 30 single dose in 40 size globules, along with Placebo in 40 size globules thrice a day for 7 days		
4	11.03.2023	Symptoms were significantly relieved, no disturbance in sleep due to cough and shortness of breath in last 7 days. Not used bronchodilator in last 7 days. Slight wheezing is present. Which aggravates after physical exertion, but subsides after rest.	8	Placebo in 40 size globules thrice a day for 15 days.		
5	28.03.2023	No episode of cough, and no nocturnal breathlessness was reported. No new complaint	5	Placebo in 40 size globules thrice a day for 30 days		

	was reported. FEV1 predicted	
	was 90 %	

Table 2 Asthma Control Questionnaire (ACQ) Scores

Table 2 Astillia Conti of Questionnan e (ACQ) Scores									
Sr. No.	Questionnaire	06 Feb 23	09 Feb 23	16 Feb23	02March 23	11 March 23	28 March 23		
1	During the past 7 days, how often were you woken by your asthma during the night	5	4	3	3	1	0		
2	During the past 7 days, how bad were your asthma symptoms when you woke up in the morning	4	2	2	3	1	0		
3	During the past 7 days, how limited were you in your activities because of your asthma	4	3	2	2	2	1		
4	During the past 7 days, how much shortness of breath did you experience because of your asthma?	5	2	2	2	1	1		
5	During the past 7 days, how much of the time did you wheeze (have noisy breathing	5	3	3	3	2	2		
6	During the past 7 days, how many puffs/inhalations of reliever medication	2	2	1	2	0	0		
7	FEV1 % Predicted	3	2	1	1	1	1		
	Total	28	18	14	16	8	5		

DISCUSSION

This case study presented an integrative approach to pediatric asthma management using individualized homeopathy. The treatment appeared to reduce the severity and frequency of asthma attacks, improve lung function, and reduce dependence on bronchodilators in this child, as evident from Asthma Control Questionnaire.

The selection of the remedy, Arsenicum Album, was based on a thorough evaluation of the patient's symptoms, temperament, and overall health and backed by repertorisation and Materia medica both. Homoeopathy aims to stimulate the body's self-healing mechanisms by matching the patient's symptoms to a carefully chosen remedy. It offers a holistic approach to asthma management, addressing the underlying causes rather than suppressing symptoms.

CONCLUSION

This case study provides evidence for the potential benefit of individualized homeopathy in the management of pediatric asthma and the reduction in the dependence on bronchodilators. While this single case study cannot form the basis of broad treatment recommendations, it provides a basis for further research. Future controlled clinical studies will help solidify the role of homeopathy in the comprehensive management of pediatric asthma, potentially offering a safe alternate approach that could improve patient outcomes and reduce dependency on conventional medicines.

ACKNOWLEDGEMENTS

The authors wish to thank Sainath Hospital OPD of Ahmedabad Homoeopathic Medical College, Parul University for providing necessary supports. The authors also extend sincere thanks to Professor Elizabeth Juniper for giving consent for using the Asthma Control Questionnaire for academic and research purposes.

CONFLICT OF INTEREST

There is no conflict of interest is involved in the above work

Funding

Nil

INFORMED CONSENT

We confirm that the patient's parents had given their written informed consent to publish his anonymized case

REFERENCES

- World Health Organization. Asthma. 2020 [cited 2021 Mar 3]. Available from: https://www.who.int/news-room/q-a-detail/asthma
- 2. Liu AH, Zeiger R, Sorkness C, et al. (2007). Development and cross-sectional validation of the Childhood Asthma Control Test. J Allergy Clin Immunol. 119(4):817-825.
- 3. Global Initiative for Asthma. Global Strategy for Asthma Management and Prevention. Available from: www.ginasthma.org. 2020.
- 4. Lefebvre CM, Hoekstra SJ.(2020). Inhaled corticosteroids: The good, the bad, and the ugly. Pediatric Health Med Ther. 11:131-142.
- 5. Ernst E. (2000). Prevalence of use of complementary/alternative medicine: a systematic review. Bull World Health Organ. 78(2):252-257.
- 6. Hahnemann S.; Organon of Medicine. 6th ed.; 1982; B Jain Publishers; New Delhi
- 7. Teixeira MZ. (2015). Individualized homeopathic treatment and fluoxetine for moderate to severe depression in peri- and postmenopausal women (HOMDEP-MENOP Study): a randomized, double-dummy, double-blind, placebo-controlled trial. PLoS One. 13;10(3): e0118440
- 8. Juniper EF, O'Byrne PM, Guyatt GH, Ferrie PJ, King DR. (1999). Development and validation of a questionnaire to measure asthma control. Eur Respir J; 14: 902–907.
- 9. RADAR Opus; Synthesis Treasure edition (Fredricke Schroyens) Repertory; B.Jain Rx LLP; Noida; India
- 10. Boericke, (2004). William; Pocket Manual of Homeopathic Materia Medica & Repertory; B. Jain Publishers; New Delhi
- 11. Allen, H. C.; (2014). The Allen's keynotes rearranged and classified with leading remedies of the Materia Medica and Bowel nodoses; B. Jain Publishers; New Delhi
- 12. Phatak, S.R.; (2000). Materia Medica of Homeopathic Medicines; B. Jain Publishers; New Delhi
- 13. Clarke, J. H.; (2009). A Dictionary of Practical Materia Medica; B. Jain Publishers; New Delhi

CITATION OF THIS ARTICLE

Siddharth Saurabh, Ketan Shah. A Case Study of Pediatric Asthma To Show The Efficacy Of Individualized Homoeopathy in Decreasing The Dependence On Bronchodilators Using Asthma Control Questionnaire. Env. Pharmacol. Life Sci., Vol 12 [12] November 2022: 414-418