TANG [HUMANITAS MEDICINE]

Case Report

Management of chronic dry cough through Ayurveda: Illustrating ayurvedic treatment principles through practice

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ABSTRACT

A case of chronic dry cough which was tried to be treated through so many medications in a period of two months, responded very well to a simple ayurvedic remedy composing of a common formulation chosen as per the ayurvedic principles of pathogenesis and management. This case may be an eye opener to the concurrent ayurvedic clinical practice and invites ayurvedic practitioners to stick to their own principles of disease management for obtaining better responses.

Keywords chronic cough, dry cough, ayurvedic treatment, Harad Bati

INTRODUCTION

Cough is a common symptom presented in any clinical setting. This can be a normal physiological phenomenon for protecting the airways from pollutants, foreign material or infections or to clear the secretions. In most cases, the cough is a self limiting feature although it can persist if associated with some pathology (Huliraj, 2014). Depending upon the duration of the symptoms the cough can be classified as acute, subacute or chronic if it persists for less than 3 weeks, 3 to 8 weeks or more than 8 weeks respectively. The etiology of cough is diverse and includes environmental as well as infective causes. Post nasal drip and post infectious cough [TUE PHYSICIAN GUIDELINES. Medical Information to Support The Decisions of TUE Committees. POST INFECTIOUS COUGH. WADA-World Anti-Doping Program Version 3.2 September 2017.] are two commonest reasons for subacute to chronic cough.

Estimated prevalence of chronic cough is 11-20% and most of the new cases of cough are reported with a complaint of chronic cough (Goldsobel and Kelkar, 2012). In most of the cases chronic cough is found to be dry or minimally productive in nature (O'Connell, 1998). Cough can be associated with a number of respiratory or non respiratory causes. Post nasal drip syndrome, post infectious cough and asthma are important respiratory causes of chronic cough.

A persistent and excessive cough may result in many complications affecting various systems. A few of such complications could be cough syncope, dizziness, head ache, seizures, chest pain, urinary incontinence, social embarrassment and reduced quality of life.

Post infectious cough is suspected when a normal chest radiograph arrives in a patient having a cough for more than 3 weeks with a history of upper respiratory tract infection. About 25 % patients of persistent cough may have a post infectious cause. Although the exact pathophysiology of post infectious cough is not known, it is believed to be caused by air way inflammation with or without hyepresponsiveness of mucosa (Irwin et al., 2011).

In patients with post infectious cough, American College of Chest Physicians (ACCP) recommends that if cough persists despite use of inhaled ipratropium, then use of inhaled corticosteroids can be considered. Use of macrolide antibiotics is recommended in patients with specific infections like B. pertussis or M. pneumoniae. ACCP also recommends use of antitussive agents such as codeine and dextromethorphan in the management of post infectious cough when the cough adversely affects the patient's quality-of-life despite all other measures (Braman, 2006). Antitussive agents including codeine, pholcodine and dextromethorphan are widely used alone or in combination with antihistamines, decongestants and expectorants for effective symptomatic relief of dry cough. Codeine, in addition to antitussive effect, possesses analgesic and minor sedative effects, which can be especially beneficial in relieving painful cough (Padma, 2013).

Post infectious cough has been a common phenomenon in clinical practice, and this is also a common observation that it is difficult to manage specially if it a post viral cough.

A case of dry chronic cough is presented here, where none of these recommended treatments offered relief and an initial symptomatic therapy from Ayurveda also could not offer much. Finally a meticulously planned but extremely simple ayurvedic remedy (using a single oral compound alone) composed of a common formulation on the lines of ayurvedic principles of disease diagnosis and management has given complete cure to the patient within in a very short time. This case report is presented here with a view that chronic and intractable clinical conditions should be reviewed thoroughly from ayurvedic perspective before arriving at any quick treatment plan. This reviewing at the case and also at the treatment principles may give us a hidden clue which may lead to success as it happened in the present case.

CASE REPORT

An otherwise healthy male of approximately 45 year age reported with chronic, incapacitating dry cough for over 8

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weeks. The cough was annoying, recurrent and was too frequent that the patient was not able to complete a sentence without a bout of cough.

The patient was working as an executive in a professional organization. He was not substantially exposed to damp, cold, smoke, dust or pollution. His nutritional status was well with approximately 68 kg weight for a height of approximately 5ft 6 inches. He was non smoker and otherwise not addicted to any substance. He was a strict vegetarian.

Upon clinical examination, there were no specific chest findings. There were no other associated illnesses. The patient was non hypertensive, non diabetic and was otherwise healthy besides the symptom of cough. It was reported by the patient that he had cold and fever for few days before 2 months which subsided in few days with symptomatic treatment. He developed cough since then. Much kind of remedies have been tried by the patient to get a cure from cough. This included a course of antibiotics, anti allergic, anti histaminic and antitussive therapy from modern medicine and symptomatic therapy from Ayurveda as well. Unfortunately, nothing worked well for the cough. He tried many home remedies like drinking hot water, drinking decoctions of ginger, piper etc ., dried peel of orange was also tried as a home remedy on recommendation of some body.

For this whole period of approximately two month he consistently avoided cold edibles and drinks at his own in order to get a relief from cough.

The cough started in a milder frequency and gradually increased in frequency as well as in intensity. It was dry all the time. Any hot water gargle or anything which would have increased the moistness in throat would have offered the relief but only transiently. Soon the moisture is over; the bout of cough would have recurred.

This was highly embarrassing and annoying to the patient as he was not able to perform his duties as an executive. He was not able to speak publically as any effort of speaking would have been interrupted by so many bouts of cough in between. This was causing a social embarrassment also because he was not able to attend public function on account of his symptoms.

During the course of his treatment, he was investigated thoroughly for any associated cause of the cough but nothing could be revealed through chest X Ray, routine biochemical and hematological investigations.

Initially he was suggested for a course of macrolides for five days along with some antihistaminic syrup. This did not give much relief. Then he was recommended for anti tussive syrup containing codein. This also did not help much. In despair, he tried a variety of ayurvedic preparations drugs upon consultation with some ayurvedic physician. These medicines included kantakari avaleha, sitopaladi churna, vasa syrup etc. These ayurvedic medicines were also taken for a substantial period but did not help much (Table 1).

Table 1. Description of various remedies tried for chronic dry cough

No	Description of remedies	Approximate number of days
1	Hot water	2 months
2	Decoction of ginger, piper	7 days
3	Kantakaari avaleha	15 days
4	Vasa cough syrup	15 days
5	Sitopaladi churna	15 days
6	Macrolides	5 days
7	Antihsitalminic syrup	7 days
8	Anti tussive syrup	7 days

At this stage of despair, he arrived at Vatsala Hospital, Lucknow for having a refreshed ayurvedic consultation.

Upon arrival, the patient was taken a detailed history of his illness and also the details of the treatment already taken. He was specially inquired for nature and presentation of his cough episodes which came out to be dry, irritating, frequent and interruptive to speech. There was a dry feeling in the throat which was irritating and for this he felt comfortable drinking something or even ingesting saliva.

His prakriti was found to be vata pitta type with all visible signs of excess pitta like premature graying and falling of hair, increased number of moles and feeling of increased warmth. He was also having dominant symptoms of vata like instability, timidity, quick approval and quick disapproval and disturbed sleep.

The symptoms of cough presented in the case were comparable to vatic kaas of ayurveda. As the patient was of vata pitta prakriti, it was a difficult to treat condition as per the ayurvedic principles of prognosis.

Upon ayurvedic pathological elaboration, it was considered as a dushti of prana vayu (a derangement of prana vayu) and hence the treatment plan was adopted accordingly. Dryness being the specific property of vata, an opposite treatment was planned with substances containing wet property.

Taking into the account of clinical presentation, the patient was prescribed for Harad Bati (HB) alone which was composed of following components (Table 2).

Table 2. Harad Bati Composition (Each 100 gm)

No	Name of the ingredient	English Name	Quantity
1	Harad	Terminalia chebula	1.1 gm
2	Pippali	Piper longum	0.5 gm
3	Shunthi	Zingiber officinale	0.5 gm
4	Jeera	Cuminnum cyminum	0.7 gm
5	Lal marich	Red chilli	0.4 gm
6	Aamla	Phyllanthus embelica	18.7 gm
7	Ajmoda	Carum coptium	0.8 gm
8	Salt	Salt	24.0 gm
9	Amchur	Unripe mangifera indica	40.0 gm
10	Kala Namak	Black Salt	10.8 gm
11	Nimbu Sat	Citric acid	0.4 gm
12	Nausadar	Ammonium chloride	3.2 gm

The treatment was recommended on muhurmuhur (frequently repeated) basis accounting for the dushti of prana vayu. The drug was available in a pellet form and the patient was advised to keep a pellet of approximate one gram in mouth till it dissolves by itself. He was recommended to have one pellet in the mouth if he feels an urge of cough. The cough intensity reduced from the first day of therapy and the symptoms completely relieved in a period of seven day. The patient is completely asymptomatic since than for over six months.

DISCUSSION

Ayurveda presents some very unique principles of disease management. Substances with opposite properties are usually recommended for the treatment of a particular dosha. Every

dosha is found to have a few unique properties (guna). This is commonly seen in ayurvedic clinical practice that when a dosha is vitiated, it is possible that all of its composing guna may not be equally vitiated. Therefore, there can be a fractional vitiation of dosha in reference to a particular guna. If this is the case, possibly identifying the substance which is opposite to the vitiated guna may be the most appropriate treatment.

Unfortunately, there are not so many substances identified in the ayurvedic clinical practice where the dosha related guna are clearly identified. Most of the times, the herbs are presented with a combination of gunas. However, principally if a dosha - guna specific therapy may be initiated, this would be highly appreciable in many aspects. Firstly, if would offer a cause specific treatment without having a trial and error method adoption. The treatment in such a case may be more precise, effective and predictable because the dosha guna casing a disease is directly treated. Secondly, it would also be reducing the cost of the therapy by reducing the number of medications limiting to the most specific component of the treatment hitting the cause. This would also reduce the wastage of herbal resources by using them most judiciously for the benefit of the patient.

Earlier also, this idea of a guna based diagnosis was proposed by identification of individual prakriti in guna perspective of various doshas. It pleaded that a person having a dominance of a particular dosha may not have an absolute dominance of all the guna components of that dosha and hence he may be prone for only those component which are in dominance and not the others despite of them being associated with that dosha as well (Rastogi, 2012).

The treatment recommended in this case and the subsequent results obtained are an eye opener for treatment approaches currently practiced in Ayurveda. Here the dosha involved in the disease was predominantly vata and the particular guna of vata which was involved in the disease was ruksha (dryness). It was this dryness of the upper respiratory tract which was causing constant irritation and initiation for the cough reflex. A moistening of the throat mucosa was therefore required to reduce the dryness, in order to reduce the irritation and subsequently to provide time for mucosa to heal by itself. Any substance with water content would have provided moisture in that case but as it happens, upon drinking, only a transient contact of water with oral mucosa happens as it quickly passes down. For such irritating cough, a prolonged moistening was required which was not possible through any oral syrup based formulation. Salt has a very special property of water retention. Ayurveda considers lavana (salt) as one rasa which reduces vata on account of its properties being opposite to vata.

Now, any preparation which is composed of salt and used in the form of pellets to be retained in the moth and allowed to be dissolved gradually in saliva with a gradual deglutition may be the most appropriate kind of medication for the particular case.

Even a kaval or gandush (oral gargles) composed of saline water may not be that effective in the case because they do not reaches to the interior of pharynx and larynx.

Harad bati (HB) had been an ideal compound composed of salt in substantial amount (approximately 35%) and was available in the form of small pellets of approximately one gram. On its oral use, it was advised to keep it in the mouth as long as possible and allow it to be dissolved in saliva with a gradual deglutition of saliva mixed with drugs. This way, the salt dissolved in saliva was there in prolonged contact with inflamed mucosa in order to provide constant moisture to it. Salt and other components of the HB were also digestives and appetizers. As a result, they were able to increase the salivary secretion which was again helpful in retaining the moisture. The approach for timing of the medication was muhurmuhur (frequently repeated method). This method was again able to give a constant contact of salt and saliva with the inflamed mucosa. This resulted in a quick healing of inflamed mucosa and resulted in quick correction of dryness.

Most interestingly, the cost of this therapy for seven days was only fifty rupees which was substantially minimal comparing to the cost of management approached earlier for previous two months.

An observation of the patient during follow-up for about six months with a non recurrence of the symptoms was able to demonstrate that this treatment approach was able to break the pathogenesis and hence the disease did not recur even after the stopping of the therapy.

CONCLUSION

This case of dry cough treated through ayurvedic treatment principles demonstrates these principles in practice. This also argues that concurrent ayurvedic clinical practice needs a revisit in view of existing treatment principles of ayurveda. Sometimes an intractable condition remains intractable only because either the disease or the pathogenesis is not understood well or a treatment is not accordingly planned. This case demonstrates that a thorough understanding of the pathogenesis and an appropriate treatment plan may result in success with a minimal of expenditure and resources as it happened in this case.

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CONFLICT OF INTEREST

The authors declare that there is no conflict of interest.

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