



**AMULYA CEFTRIN, AMULYA AMRITATULSI RASAYAN AND AMULYA TULSI  
DROP IN TREATING COLD COUGH, CONGESTION AND RESPIRATORY  
INFECTION: A CASE STUDY**

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**ABSTRACT**

Amulya Ceftrin is an ayurvedic formulation prepared using Guggal (*Balsamodendron mukul*), Geloye (*Tinospora cordifolia*), Nimba (*Azadirachta indica*), Shigru (*Moringa pterygosperma*), Patol (*Trichosanthes dioica*), Tulsi (*Ocimum sanctum*), Sariva (*Hemidesmus indicus*), Amla (*Embllica officinalis*), Ashwagandha (*Withania somnifera*), Taj (*Cinnamomum cassia*), Haldi (*Curcuma longa*), Sonth (*Zingiber officinale*). Amulya Amritatulsi Rasayan an ayurvedic formulation prepared using Tulsi (*Ocimum sanctum*) and Geloye (*Tinospora cordifolia*). Amulya Tulsi drop an ayurvedic formulation prepared using Rama Tulsi (*Ocimum tenuifloram*), Shyama Tulsi (*Ocimum sanctum*), Shwet Tulsi (*Ocimum kilimandascharicum*), Van Tulsi (*Ocimum gratissimum*) and Nimbu Tulsi (*Ocimum canum*). Tulsi, Geloye, Guggal, Nimba, Shigru, Patol, Sarvia, Amla, Ashwagandha, Taj, Haldi, Sonth used in the formulation are available in India and known for medicinal use since ancient times. These plants are used in Ayurvedic system of medicine for immunomodulation, total rejuvenation, anti-bacterial and anti-oxidant activity caused by their chemical constituents are well documented. Therapeutic uses of these plants are considered as safe, inexpensive and efficient. The chemical constituents present in different parts of these plants heal many diseases. Twenty five patients in age group of 20-57 years suffering from, symptoms such as itchy and runny nose, nasal congestion, cough, dry cough, cold, congested chest, sneezing, difficulties in swallowing, respiratory infection, sore throat, chronic cough, mild fever, headache, weakness, fatigue, were given treatment at Ayusham Health Care- an Ayurvedic clinic based at Plot No 293, Industrial area, Phase-1, Panchkula, Haryana, India. Amulya Ayurvedic clinic, Panchkula, India. These patients were treated using Amulya Ceftrin 700 mg twice a day, along with Amulya Amritatulsi Rasayan capsule 500 mg twice a day and Amulya Tulsi Drop (2 drop) for fifteen days. Out of 25 patients 3 patients left treatment in between without giving any feedback. Out of remaining 22 patients, 19 patients (87%) were successfully treated and completely cured. Two patients (9%) continued treatment with much lesser symptoms. One (1) patient (4%) with smoking habit completed treatment but got no relief. The present case study suggests that the biologically active components of Tulsi and Geloye in combination with Guggal, Nimba, Shigru, Patol, Sarvia, Amla, Ashwagandha, Taj, Haldi, Sonth present in Amulya Ceftrin, Amulya AmritaTulsi Rasayan and Amulya Tulsi drop had synergistic activity for the effective treatment of cold, cough, congestion and upper respiratory infection and show promise as a cheap and effective treatment.

**KEYWORDS:** Ayurveda, Cold, Cough, Congestion.

**INTRODUCTION**

Cold Cough, congestion and respiratory infection can be caused by bacteria and leads to itchy and runny nose, nasal congestion, cough, dry cough, cold, congested chest, sneezing, difficulties in swallowing, chronic cough, mild fever, headache, weakness, fatigue sore throat (pharyngitis also called tonsillitis because it leads to inflammation of the tonsils). In cases of infectious pharyngitis that are not viral, the cause is almost always

a bacterium, usually a group A beta-hemolytic Streptococcus, which causes what is commonly called strep throat. Strep throat can spread quickly and easily within a community, especially during late winter and early spring. Bacterial infections are treated by prescribing an antibiotic<sup>[1]</sup> oral broad-spectrum antibiotic.<sup>[2]</sup> Antibiotic drugs are associated with side effects such as, nausea and vomiting, bronchospasm, diarrhoea, rash, dizziness and yeast infections.<sup>[3,4]</sup>

Limitations of existing methods for the treatment of respiratory infections caused bacteria makes it important to search for other new alternative treatment.

Complementary and alternative therapies for Cold Cough, Congestion and respiratory infection were commonly used by ancient people to cure or prevent such infections and many nations obtained traditional experience in such remedies. Traditional medical practice has been known in many parts of the world.<sup>[5-7]</sup>

Widespread antimicrobial activity of several plants has been described by Mohoti et al.<sup>[8]</sup> Use of Medicinal Plants and herbs as microbial agents, has been extensively reviewed by Parmar & Rawat<sup>[9]</sup>, and as immunity boosting agents have been reviewed extensively by Sultan.<sup>[10]</sup> Fighting 'Nature with Nature' approach against bacteria finds strong scientific support in published literature. Herbal plants, plant preparations and phytoconstituents have proved useful in attenuating infectious conditions and were the only remedies available, till the advent of antibiotics.

Tulsi (*Ocimum sanctum* Linn.) means 'incomparable one' or 'matchless one' and is derived from Sanskrit.<sup>[11]</sup> Different parts of this plant have been used in indigenous medicine. This plant is traditionally known for its medicinal properties throughout the world.<sup>[12-14]</sup> The essential oil of *O. sanctum* has been known to be administered against asthma, bronchitis, sinus infections, constipation, nausea, vomiting and cramp.<sup>[15]</sup> Plant extracts are potential sources of novel antimicrobial compounds, especially against bacterial pathogens.<sup>[16-19]</sup> The aqueous and alcoholic extract of *O. sanctum* showed inhibitory effect of growth in many microbes.<sup>[20]</sup> Rahman et. al.<sup>[21]</sup> reported antibacterial activity of *O. sanctum* leaf methanol extract against gram positive and gram negative bacterial pathogens. Antimicrobial property of *O. sanctum* was documented by Joshi et.al.<sup>[22]</sup> Mandal et.al.<sup>[23]</sup>

*Tylophora cordifolia*, commonly known as Guduchi or Giloy, is used as a medicine for centuries in the Ayurvedic and Unani systems of medicine. Compound from *T. cordifolia* have been shown to possess the immune-stimulating properties.<sup>[24,25]</sup> *T. cordifolia* has

been shown to inhibit the intracellular growth of *Mycobacterium tuberculosis* through toll-like receptor TLR4 dependent signaling.<sup>[26]</sup> Macrophages treated with aqueous extract and methanolic extract of *T. cordifolia* showed immune-stimulating activities and secrete higher levels of IL-1 $\beta$ , IFN- $\gamma$ , and TNF- $\alpha$  bipolarizing.<sup>[27]</sup> The methanolic extract of *T. cordifolia* showed greater activity against infection in macrophage and in mice.<sup>[27]</sup>

Ashwagandha (*Withania somnifera*) is an important herb in ayurvedic and indigenous medical systems. *W. somnifera* exhibited significant antioxidant and antibacterial activities.<sup>[28,29]</sup> It has also exhibited immunomodulatory activity.<sup>[30]</sup>

Anti-microbial, immunomodulatory, anti-oxidant, anti-inflammatory activity of an extract of *Boswellia* sps.<sup>[31,32]</sup> Haldi (*Curcuma longa*),<sup>[33,34]</sup> Shigru (*Moringa pterygosperma*),<sup>[35]</sup> Nimba (*Azadirachta indica*).<sup>[36,37]</sup> Patol (*Trichosanthes diocia*),<sup>[38]</sup> Sariva (*Hemidesmus indicus*),<sup>[39]</sup> Amla (*Embllica officinalis*).<sup>[40]</sup> Taj (*Cinnamomum cassia*).<sup>[41]</sup> Sonth Antipyretic, Antirheumatic.<sup>[42]</sup> is well documented.

In the present case study, we evaluated the effect of Amulya Ceftrin, an ayurvedic formulation along with two other ayurvedic formulations namely Amulya Amritatulsi Rasayan and Amulya Tulsi drop as cheap and effective treatment on patients suffering from cold, cough, congestion and upper respiratory infection.

## MATERIALS AND METHODS

**Amulya ceftrin:** Amulya Ceftrin is an ayurvedic formulation for human, containing Guggal (*Balsam odendronmukul*), Geloye (*Tinospora cordifolia*), Nimba (*Azadirachta indica*), Shigru (*Moringa pterygosperma*), Patol (*Trichosanthes diocia*), Tulsi (*Ocimum sanctum*), Sarvia (*Hemidesmus indicus*), Amla (*Embllica officinalis*), Ashwagandha (*Withania somnifera*), Taj (*Cinnamomum cassia*), Haldi (*Curcuma longa*), Sonth (*Zingiber officinale*) Amulya Ceftrin capsule is manufactured by Amulya Herbs private Ltd., 97, HSIIDC, I.E., Barwala-134118, Distt. Panchkula, Haryana. Details of the Amulya Ceftrin capsules are given in Table 1.

**Table 1: Showing details of amulya ceftrin capsules.**

Sr. no	Particulars					
1	Name of the product	Amulya Ceftrin				
2	Type of the Formulation	Capsule				
3	Category	Proprietary				
4	Use	Human				
5	System	Ayurvedic				
6	Composition	Each 700 mg contains				
		Ingredients	Scientific Name	Quantity	Part used	Form
		Guggal	<i>Balsam odendronmukul</i>	150mg	exeduate	Powder
		Geloye	<i>Tinospora cordifolia</i>	75mg	Stem	Ext.Powder

		Nimba	<i>Azadirachta indica</i>	75mg	Leaves	Ext.Powder
		Shigru	<i>Moringa pterygosperma</i>	50mg	Leaves	Ext.Powder
		Patol	<i>Trichosanthe sdiocia</i>	50mg	Leaves	Ext.Powder
		Tulsi	<i>Ocimum sanctum</i>	50mg	Leaves	Ext.Powder
		Sarvia	<i>Hemidesmus indicus</i>	50mg	Root	Powder
		Amla	<i>Embllica officinalis</i>	50mg	Fruit Pulp	Powder
		Ashwagandha	<i>Withania somnifera</i>	25mg	Root	Ext.Powder
		Taj	<i>Cinnamomum cassia</i>	25mg	Stem Bark	Powder
		Haldi	<i>Curcuma longa</i>	25mg	Root	Ext.Powder
		Sonth	<i>Zingiber officinale</i>	25mg	Rhizome	Powder
		Kapardika		50mg	Bhasam	Powder
7	Method of Preparation	Reduced all ingredients to fine powder and mixed thoroughly in proper ratio. Mixed well in mortar and finally in a mass mixture to make homogenous powder. Stored in a dry place. Filled in capsule.				
8	Indication	Immunomodulator, Anti allergic, Rasayan.				
9	Shelf life	3 years				
10	Side effect	Nil				

**Amulya amritatulsi rasayan:** Amulya Amritatulsi Rasayan is a proprietary ayurvedic medicine for human, manufactured by Amulya Herbs private Ltd., 97,

HSI IDC, I.E., Barwala-134118, Distt. Panchkula, Haryana. Details of the Amulya Amritatulsi Rasayan are given in table.2.

**Table 2: Showing details of amulya amrita tulsi Rasayan.**

Sr. no	Particulars						
1	Name of the product	Amulya Amritatulsi Rasayan					
2	Type of the Formulation	Capsule					
3	Category	Proprietary (manufacturing Licence No.2) (ISM)HR					
4	Use	Human					
5	System	Ayurvedic					
6	Composition	Each 500 mg contains					
		Ingredients	Scientific Name	Quantity	Part used	Form	Bhava Prakash Nighantu (BPN)page No
		Tulsi	<i>Ocimum sanctum</i>	250mg	Leaves	Extract	BPN496
		Geloye	<i>Tinosporacordifolia</i>	250mg	Stem	Extract	BPN258
7	Method of Preparation	Reduced all ingredients to fine powder and mixed thoroughly in proper ratio. Mixed well in mortar and finally in a mass mixture to make homogenous powder. Stored in a dry place. Filled in capsule.					
8	Indication	Antipyretic, Rheumatism, Uric Acid and Prophylactic.					
9	Shelf life	3 years					
10	Side effect	Nil					

**Amulya tulsi drop:** Amulya Tulsi Drop is a proprietary ayurvedic medicine for human, manufactured by Amulya Herbs private Ltd., 97, HSI IDC, I.E., Barwala-134118,

Distt. Panchkula, Haryana. Details of the Amulya Tulsi Drop are given in table. 3.

**Table 3: Showing details of amulya tulsi drop.**

Sr. no	Particulars						
1	Name of the product	Amulya Tulsi drop					
2	Type of the Formulation	Extract					
3	Category	Proprietary					
4	Use	Human					
5	System	Ayurvedic					
6	Composition	Each 1ml contains					
		Ingredients	Scientific Name	Quantity	Part used	Form	Bhava Prakash Nighantu (BPN) page No
		Rama Tulsi	<i>Ocimum tenuifloram</i>	20%	Panchang	Liquid	BPN359

						Extract	
		ShyamaTulsi	<i>Ocimum sanctum</i>	20%	Panchang	Liquid Extract	BPN359
		ShwetTulsi	<i>Ocimum kilimandascharicum</i>	20%	Panchang	Liquid Extract	BPN167
		Van Tulsi	<i>Ocimum gratissimum</i>	20%	Panchang	Liquid Extract	BPN497
		NimbuTulsi	<i>Ocimum canum</i>	20%	Panchang	Liquid Extract	BPN359
7	Preservatives						
	i.	M.P.S.		0.30%			
	ii.	P.P.S.		0.03%			
8	Method of Preparation	Liquid extract of all 5 types of Tulsi as mentioned above was mixed thoroughly and mixed with Preservative. After a proper filtration it was filled in suitable container					
9	Indication	Beneficial for cough and breathing trouble and Balya Rasayan, Rejuvenator.					
10	Dosages	5-10 drops twice a day					
11	Anupam/ better result	With luke warm water					
12	Shelf life	3 years					
13	Side effect	Nil					

**Subjects:** Twenty five patients in age group of 20-57 years with symptoms of Cold Cough, Congestion and upper respiratory infection were treated at Ayusham Health Care- an ayurvedic clinic based at Plot No 293, Industrial area, Phase-1, Panchkula, Haryana, India, were considered in the present case study. When the patients approached the clinic, they were suffering from many of the following symptoms such as itchy and runny nose, nasal congestion, cough, dry cough, cold, congested

chest, sneezing, difficulties in swallowing, respiratory infection, sore throat, chronic cough, mild fever, headache, weakness, fatigue. The patients were living in urban and peripheral urban region of Panchkula, Haryana, India.

**Treatment given:** Details of treatment protocol are given in Table 4.

**Table 4: Showing details of 15days treatment given to the patient.**

Sr. No	Day	Medicine prescribed
1	Day 01-15 days	Ceftrin 700mg capsule, 1 capsule BD+ Amulya Amritatulsi Rasayan 500mg capsule, 1 capsule BD +Amulya Tulsi Drop 2 drops (empty stomach).

## RESULTS AND DISCUSSION

Out of 25 patients, 3 patients left treatment in between without giving any feedback. Out of remaining 22 patients, 19 patients (87%) were successfully treated and completely cured. Two patients (9%) continued treatment with much lesser symptoms. One patient (4%) with smoking habit completed treatment but got no relief. Improvement in health condition of the 21 (96%) patients started between three-five days after administering 1 capsule of Ceftrin (700 mg) BD + 1 capsule of Amulya Amritatulsi Rasayan (500mg) BD, +

Amulya Tulsi Drop 2 drops (empty stomach). Remission from fever, significant improvement in headache, itchy and runny nose, nasal congestion, cough, congested chest, sneezing, and difficulties in swallowing was reported from 3<sup>rd</sup> day of treatment. Remission from dry cough, chronic cough was reported from 5 to 10 days. Remission from weakness and fatigue was reported from 10<sup>th</sup>-13<sup>th</sup> day of the treatment. Remission in all the symptom was reported on day 12<sup>th</sup>. No recurrence took place and treatment was discontinued after 15<sup>th</sup> day. Details of the results are given in Table- 5.

**Table 5: Details of 30 days treatment given to patients.**

Day	Medicine prescribe	Symptom	Remarks
Day 1	1capsule of Ceftrin (700mg) BD; 1 capsule of Amulya Amritatulsi Rasayan (500mg) BD; Amulya Tulsi Drop 2 drops(empty stomach).	Itchy and runny nose, nasal congestion, cough, dry cough, cold, congested chest, sneezing, difficulties in swallowing, upper respiratory infection, sore throat, mild fever, headache, weakness, fatigue,	Treatment started
Day 2	Same as day 1	Same as day 1	Same as day 1
Day 3-5	Same as day 1	Remission from fever. Significant improvement in headache, itchy and runny nose, nasal congestion, cough, congested chest, sneezing,	Improvement in symptom

		difficulties in swallowing	
Day 5-10.	Same as day 1	Remission from dry cough, chronic cough	Improvement in symptom
Day 10-13	Same as day 1	Remission from weakness and fatigue	Improvement in symptom
Day 14-15	Same as day 1	No symptom	Patient got successfully treated and start working

The use of medicinal plants to treat disease is almost universal and is more affordable than purchasing expensive conventional drugs. Plants are used in Ayurvedic system of medicine for total rejuvenation, immunomodulation, antibacterial activity and as antioxidant.

The plants, used for preparation of all the three formulations i.e Amulya Ceftrin, Amulya Amritatuli Rasayan and Amulya Tulsi drop are available in India and known for medicinal use since ancient times. Therapeutic uses of these plants are considered as safe, inexpensive and efficient. The chemical constituents present in different parts of these plants heal many diseases. Antibacterial, immunomodulatory, total rejuvenation activity of chemical constituents of Gelay, Tulsi, Guggal, Ashwagandha, Nimba, Shigru, Patol, Sarvia, Amla, Taj, Haldi, Sonth is well documented. The present case study suggests that the biologically active components of Tulsi and Gelay in combination with Guggal, Nimba, Shigru, Patol, Sarvia, Amla, Ashwagandha, Taj, Haldi, Sonth present in Amulya Ceftrin, Amulya Amritatuli Rasayan and Amulya Tulsi Drop had synergistic activity for the effective treatment of cold, cough, congestion and upper respiratory infection and show promise as a cheap and effective treatment

Antibiotic activity of extracts of plants present in Amulya Ceftrin, 'Amulya Amritatuli Rasayan' and Amulya Tulsi Drop against Cold Cough, Congestion and respiratory infection in patients, may have acted similarly as reported earlier in *in vitro* condition.<sup>[16-42]</sup> Anti-oxidant and immunomodulatory and total rejuvenator activity<sup>[24-42]</sup> of extracts of plants present in Amulya Ceftrin, 'Amulya Amrita tulsi Rasayan' and Amulya Tulsi Drop may have helped to improve overall health condition of the patient.

## CONCLUSION

This study shows that the combination of Amulya Ceftrin, 'Amulya Amritatuli Rasayan' and Amulya Tulsi Drop have the potential to effectively cure cold, cough, congestion and upper respiratory Infection without side effects and have a rejuvenating effect. Therefore these three formulations in the prescribed dosage could be effectively used to cure cold, cough, congestion and upper respiratory infection. Further study with larger number of patients can help in exploring high potential of the formulations in treating the disease.

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