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(eISSN-2321-1563)

ORIGINAL RESEARCH ARTICLE

A CLINICAL STUDY ON EFFICACY OF INDUKANTA YOGA AND DARVYADI YOGA IN TUNDIKERI W.S.R. TO ACUTE TONSILLITIS

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Access this article online: www.jahm.in

Received on: 27/04/14, Revised on: 09/05/14, Accepted on: 15/05/14

ABSTRACT

Background: Tundikeri (Tonsillitis) is one of the common prevalent diseases which generate morbid conditions in seasonal variations of a maximum number of children during the first few years of life. The incidence of this disease is about 7% of all visits to the pediatrician. Even with the advent of newer antibiotics the incidence of such recurrent attacks and chronicity of the disease is mounting day by day. Hence present study Aclinico-comparative study on efficacy of Indukanta Yoga and Darvyadi Yoga in Tundikeriw.s.r. Acute Tonsillitis.**Methods:**40 children suffering from Acute Tonsillitis (Tundikeri) were selected from KaumarbhrityaO.P.D of Alva's Ayurveda Medical College Hospital, Moodbidri and from other referrals and camps were randomly selected and grouped in two, where Group A received Indukanta Yoga and Group B received Darvyadi Yoga for a period of 10 days. **Results:**The responses of both the groups were assessed clinically after 10 days of treatment. There was a statistically significant change ($p < 0.001$) in the overall signs and symptoms of Acute Tonsillitis. **Conclusion:**The final evaluation proved that both the groups were statistically significant but Indukanta Yoga is better in reducing the signs and symptoms of Acute Tonsillitis (Tundikeri) in children of 5-15 yrs. age group.

Key Words: Indukanta Yoga, Darvyadi Yoga, Tundikeri and Acute Tonsillitis.

INTRODUCTION

Tundikeri[1] is one of the common prevalent diseases which generate morbid conditions during seasonal variations in a maximum number of children during the first few years of life. The incidence of this disease is about 7% of all visits to the pediatrician. Repeated episodes of infection are often seen through the disease if not managed properly, which later

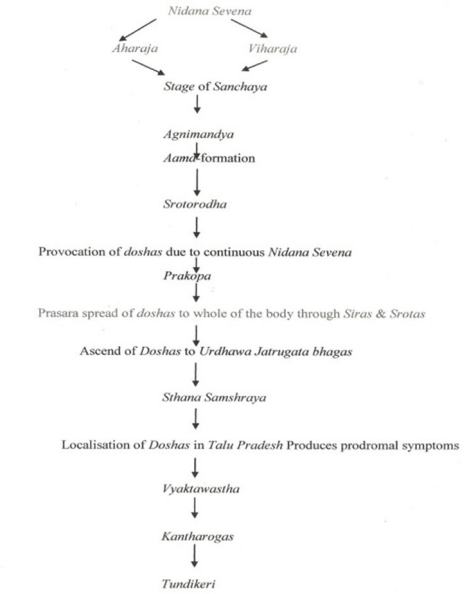
even interferes with the growth and development of child. Even with the advent of newer antibiotics the incidence of such recurrent attacks and chronicity of the disease is mounting day by day. Though surgical excision is the current treatment option it is not the ultimate solution for recurrent episodes of such infections. In spite of this, immunological role of tonsils in preventing infections, complications involved with the tonsillectomy and age factor also to be considered against tonsillectomy. Though the immunological functions are as yet not totally understood, lymphocyte production is an established function of tonsil. The immunological role of the tonsil and adenoid is to induce secretory immunity and to regulate the production of secretory immunoglobulins. Situated at the opening of the pharynx to the external environment, the tonsils and adenoid are in a position to provide primary defense against foreign matter. Vagbhattadescribed the features of the disease under Kanthagataroga(Diseases pertaining to the Throat)in the chapter named Mukharogavijnaniya(Chapter dealing with the diseases of Oral cavity) [2] and its treatment was explained in the very next chapter namely Mukharoga pratisheda Adhyaya.[3]

Table no.1 showing Samprapti Ghataka

SamraptiGhataka	
Nidana	Kapha and Rakta Prakopaka Aahara and Vihara
Dosha	Kapha, Rakta
Dushya	Rasa, Rakta, Mamsa
Srotas	Rasavaha, Raktavaha, Mamsavaha
Agni	Jataragni, Dhatwagnimandya
Srotodusti	Sanga and SiraGranthi
Rogamarga	Bahya
Udbhavasthana	Amashaya
Adhistana	Antarmukha

Various etiological factors vitiate the Doshas (Body humors). The stage of accumulation of Dosha in its own site of predominance is called Chayavastha. It is followed by Prakopa-excitement of Doshas. The overflowing of vitiated Doshas from their own Sthana (site) is Prasara. In the Sthanasamsraya stage Doshas accumulate in specific regions of the body and manifest signs and symptoms of the disease. Doshas interact with body elements in the Vyakti (conspicuous), and manifest as disease specific signs and symptoms. Bhedavastha (differentiate) is the last in which the disease become chronic and manifest as irreversible changes[4].

Flow Chart No. 1 Samprapti of Tundikeri under the light of Shat Kriyakala



Specific symptoms of Tundikeri according to Sushruta, Tundikeri is characterized by large cystic swelling (Sthula shopha) associated with pricking pain (Toda), burning sensation (Daha) and suppuration (Prapaka). Dosha involvement is as that of Galashundika i.e. Kapha and Rakta[5].

Ayurveda with its rich heritage provides many effective formulations for precise management

of such acute infections. In the present study it is planned to evaluate the efficacy of Indukanta Yoga and Darvyadi Yoga. Although Indukanta Yoga is extensively used in the clinical practice but no empirical data related to its therapeutic efficacy was available, on another hand Darvyadi Yoga has been explained in our classics under MukharogaChikitsa, hence research is required to prove their therapeutic value.

In the present study, well established clinical trials like Randomized Comparative Trials has been chosen, to have highest level of significance to prove the efficacy. So a Therapeutic, single blinded, Randomized Comparative Trial was designed with an aim to compare and to prove the efficacy of the Indukanta Yoga and Darvyadi Yoga on Tundikeri with special reference to Acute Tonsillitis in children of 5-15 years.

Ingredients of IndukantaSyrup[7,8]:

OBJECTIVES:

1. To compare the efficacy of Indukanta Yoga and Darvyadi Yoga in Tundikeri.
2. To study the concept of Tonsillitis with comparable entities in Ayurveda.

Materials & Methods

Study Design: Single blind, randomized Comparative Clinical Trial.

Collection of Raw Materials: The required amount of raw drug was collected from Alva's Pharmacy Moodbidri. The authenticity of these drugs was approved by concerned staff. All the drugs were washed, cleaned and dried.

Drug Review

Indukanta Yoga: Indukanta Ghrita as described in Sahasrayoga[6], an authentic textbook of pharmaceutical preparations widely followed in South India.

Table. No – 2 Showing Pharmacodynamics of Indukanta Yoga

S.No.	Dravya	Latin Name	Parts used	%
1.	Bilwa	*Aeglemarmelos*	Root	1.8
2.	Agnimandha	*Clerodendrumphlomidis*	Root	1.8
3.	Shyonaka	*Oroxylumindicum*	Root	1.8
4.	Patala	*Stereospermumsuvaveolens*	Root	1.8
5.	Gambari	*Gmelinaarborrhoea*	Root	1.8
6.	Kantakari	*Solanumsurattense*	Root	1.8
7.	Bruhati	*Solanumindicum*	Root	1.8
8.	Shalaparni	*Desmodiumgangeticum*	Root	1.8
9.	Prushanaparni	*Urariapicta*	Root	1.8
10.	Gokshuru	*Tribulusterrestris*	Root	1.8
11.	Putika	*Holopteleaintegrifolia*	Bark	1.8
12.	Devadaru	*Cedrusdeodara*	Bark	1.8
13.	Pippali	*Piper longum*	Fruit	1.8
14.	PippaliMoola	*Piper longum*	Root	1.8

15.	Chavya	*Piper retrofractum*	Fruit, Root	1.8
16.	Chitraka	*Plumbagozeylanica*	Root	1.8
17.	Nagar	*Zingiberofficinale*	Root	1.8
18.	Yavakshara	*Potasiicarbonas*	Panchanga	1.8
19.	Sugar granesSitakhanda	Product of *Sacharumofficinalis*	Stem	66

Darvyadi Kwatha[9]:

Darvyadi Yoga has been explained in Ashtanga Hridya Uttaratantra under Mukha Roga Chikitsa. This Yoga contains Devadaru, NimbaTwak, Takshya[10] (Rasanjana) and Kutaja Beeja. It has been indicated in all types of Mukharogas. Analysis of the ingredients shows that it is an excellent combination of anti-inflammatory and anti-pyretic drugs.

Table. No – 3 Showing Pharmacodynamics of Darvyadi Yoga

S.No.	Drug	Latin Name	Parts used	%
1.	Daruharidratwak	*Berberisaristeta*	Twak	8.5
2.	Nimbatwak	*Azadiractaindica*	Twak	8.5
3.	Rasanjana	*Berberisaristeta*	Niryasa	8.5
4.	KutajaBeeja	*Holarrhenaantydysentrica*	Seed	8.5
5.	Sugar granesSitakhanda	Product of *Sacharumofficinalis*	Stem	66

Method of Preparation of Syrup[11]: The syrups were prepared as per Indian Pharmacopoeia method. The decoction of the drugs was prepared according to the instructions given in Sharangadhara Samhita and was converted in to syrup form by adding 66% of sugar. To prepare 4 litres of Indukanta Syrup 2.5 kilograms drugs in Yavakuta form was boiled with 16 times of water under low heat and reduced to 1/8thi.e. 5 litres and filtered then 66% i.e. 3 kilograms Khanda Sharkara by weight was added to the decoction and again boiled to prepare syrup form. The process was continued until the syrup shows one – Tari. Again it was filtered, bottled and sealed.

Source & Sampling: The children affected with Tundikeri (Acute tonsillitis) with age limit of 5 to 15 years attending the outpatient and inpatient unit of department of Kaumarbhritya Alva's Ayurvedic Medical College, Moodbidri, Special medical camps and other referrals were the research population of the study. Simple Random sampling was followed in the study. Selected subjects were randomly divided into two groups, group A and group B by using Table of Random Number.

Sampling Element: Sampling element was children of 5 to 15 years affected with Acute Tonsillitis

(Tundikeri).

Sampling Fraction: Children in the age groups 5 to 10 years and 10 to 15 years with clinical features of

Acute Tonsillitis attending the outpatient and inpatient units of Department of Kaumarbhritya, Alva's

Ayurveda Medical College, Moodbidri, Special medical camps and other referrals were the sampling

fraction.

Inclusion Criteria

- Children of 5 to 15 years presenting with clinical manifestations of acute tonsillitis attend the OPD unit

Exclusion Criteria

- Children suffering from chronic tonsillitis,
- Complications like Peritonsillar abscess
- other systemic illness

Study Setting: Study was started on February 2012 and completed by December 2012.

Technique of Data Collection: As per the inclusion criteria, the children suffering from Acute Tonsillitis(Tundikeri) were thoroughly interrogated, history and facts were noted in a specially designed clinical proforma. It included past illness, physical findings, clinical manifestations and treatment history.

Intervention:

Group A

Drug Indukanta Yoga

Dose 10ml for 5-10 yr, 15 ml for 10-15 yr

Time of administration BD (morning and night after meal)

Duration: 10 days

Follow up 15 days after treatment

Group B

Drug Darvyadi Yoga

Dose 10ml for 5-10 yr, 15 ml for 10-15 yr

Time of administration BD

Duration 10 days

Follow up 15 days after treatment

Diet and regimen chart was given to parents and compliance was checked during each visit.

- Preference to hot food and drinks.
- Avoid excessive cold, oily, dry and heavy foods.
- Avoid exposure to extremes of climate.
- Hot water bathing.
- Avoid intake of fish, meat, black gram, curds, and fermented foods.

Laboratory investigation:1) TLC2) DLC3) ESR4) Other Investigations if necessary.

Assessment Criteria

Both the groups were assessed before and after the study by observing

- Graded clinical signs and symptoms
- Routine blood investigations TLC, DLC, E.S.R.

Assessment Parameters:

The result is evaluated on the basis of the relief of signs and symptoms and relief is classified as mild, moderate and complete according to the rate of cure.

No Improvement : 0-25% of signs and symptoms were cured

Mild Improvement: 25-50% of signs and symptoms were cured

Moderate Improvement: 50-75% of signs and symptoms were cured

Complete Improvement: >75% of signs and symptoms were cured

For various features the scoring was given as follows-

Table. No 4 Showing grading of Dysphasia

No difficulty in swallowing	Grade

	'0'
Patient feels difficulty in swallowing of solid matters	Grade '1'
Patient unable to swallow even saliva	Grade '2'
Patient unable to open mouth completely due to severe pain	Grade '3'

Table. No – 5 Showing grading of Redness in Mucous Membrane :

No change in colour of mucus membrane	Grade '0'
Redness present only over Peritonsillar surface	Grade '1'
Redness present on both anterior and posterior pillars	Grade '2'
Redness present completely over oropharynx including tonsils	Grade '3'

Enlargement of the tonsil is graded as 1/2/3 i.e. the distance between the edge of the anterior palatine arch and the line passing through middle of the uvula and soft palate is divided conventionally into three parts. If the tonsil extends to one third of this distance the size is noted as '1'. If it extends to the two third of this length size as 2 and if the tonsil extends up to the midline of the pharynx, the size is noted as 3.

Table. No – 8 Showing grading of Enlarged lymph nodes (jugulodigastric lymph node)**:-**

No palpable lymph nodes	Grade'0'
Palpable lymph node unilateral	Grade'1'
Palpable lymph node bilateral	Grade'2'
Enlargement bilateral, visible and prominent	Grade '3'

Table. No – 9 Showing grading of Halitosis (Bad Breath):-

Halitosis absent	Grade '0'
Halitosis present only when opening of mouth angle completely	
Halitosis present during yawning	Grade'2'
Halitosis present even during talking	Grade '3'

Table. No – 6 Showing grading of Improvement in Temperature (as observed by its fall):

Normal temperature i.e.98.6^{0}F	Grade '0'
Temperature rises from 98.6^{0}F – 100^{0}F	Grade'1'
Temperature rises from 100^{0}F-102^{0}F	Grade'2'
Temperature more than 102^{0}F	Grade'3'

Table. No – 7 Showing grading of Enlargement of Tonsils:-

No enlargement	Grade '0'
Mild enlargement of tonsils(Explanation in given below)	Grade '1'
Moderate enlargement of tonsils	Grade'2'
Severe enlargement of tonsils (Kissing Tonsils)	Grade'3'

Table. No – 10 Showing grading of Pricking Pain:-

No pain	Grade '0'
Pain during talking	Grade'1'
Continuous pain	Grade'2'
Severe pain – can't open the mouth	Grade'3'

RESULTS:

The randomly selected 20 patients in each group were given the medicine for a period of 10 days

and then followed for a period of 15 days. Both the Groups were assessed before treatment, during treatment, after treatment and after follow up. The subjective and objective parameters were graded for statistical evaluation. The data were encoded in the case sheet and assessment chart and the observations were analysed using appropriate statistical methods for comparison such as Paired' test and Unpaired 't' test.

Dysphagia: In Group A 86.66% children were improved & in Group B 85.71% children were improved. These results show that both the treatments were effective in treating Dysphagia but Group A was comparatively more effective than Group B.

Redness Of Mucous Membrane – In Group A 87.87% children were improved & in Group B 80% children were improved. These result shows that both the treatments were effective in reducing Redness of Mucous Membrane, but Group A was comparatively more effective than Group B.

Fall in Temperature - In Group A 91.17% children were improved &in Group B 85.71% children were improved. Both the therapies were effective, but in Group A effectiveness is more than Group B.

Enlargement of Tonsils -In Group A86.66% children improved & 84.61% in Group B children were improved. Both the therapies were effective, but in Group A effectiveness is more than Group B.

Enlargement of Lymph Nodes - In Group A, 85.71% childrenwere improved & in Group B 79.16% children were improved. Both the therapies were effective, but in Group A effectiveness is more than Group B.

Halitosis - In Group A 83.33% children were improved &in Group B 76.47% children were improved. Both the therapies were effective, but in Group A effectiveness is more than Group B.

Pricking Pain - In Group A 93.75% children were improved &in Group B 81.81% children were improved. Both the therapies were effective, but in Group A effectiveness is more than Group B.

Table. No – 11 Showing Assessment of Parameters in Group A at First Follow up

Parameter	Mean BT	Mean AT	% of Improvement	SD	SE	T	P
Dysphagia	1.50	1.05	30	0.51	0.11	3.94	<0.001
Redness in Mucous membrane	1.65	1.1	33.33	0.51	0.11	4.81	<0.001
Fall in temperature	1.70	0.95	44.11	0.44	0.09	7.5	<0.001
Enlarged Tonsils	1.5	0.90	40	0.50	0.11	5.33	<0.001
Enlarged lymph node	1.4	0.95	32.14	0.51	0.11	3.94	<0.001
Halitosis	0.90	0.55	38.88	0.48	0.10	3.19	<0.001
Pricking Pain	1.65	1.05	37.5	0.50	0.11	5.33	<0.001

Table. No – 12 Showing Assessment of Parameters in Group A at Second Follow up

Parameter	Mean BT	Mean AT	% of Improvement	SD	SE	T	P
Dysphagia	1.5	0.65	56.66	0.36	0.08	10.37	<0.001
Redness in Mucous membrane	1.65	0.55	68.75	0.30	0.06	15.98	<0.001
Fall in temperature	1.7	0.40	76.47	0.47	0.10	12.36	<0.001
Enlarged Tonsils	1.5	0.30	80	0.41	0.09	13.0	<0.001
Enlarged lymph node	1.4	0.40	71.42	0.45	0.10	9.74	<0.001
Halitosis	0.90	0.20	77.77	0.47	0.10	6.65	<0.001
Pricking Pain	1.65	0.55	66.66	0.44	0.10	11.0	<0.001

Table. No – 13 Showing Assessment of Parameters in Group A at Third Follow up

Parameter	Mean BT	Mean AT	% of Improvement	SD	SE	T	P
Dysphagia	1.50	0.20	86.66	0.65	0.14	8.85	<0.001
Redness in Mucous membrane	1.65	0.20	87.87	0.60	0.13	10.7	<0.001
Fall in temperature	1.7	0.15	91.17	0.51	0.11	13.5	<0.001
Enlarged Tonsils	1.5	0.20	86.66	0.47	0.10	12.3	<0.001
Enlarged lymph node	1.4	0.20	85.71	0.61	0.13	8.7	<0.001
Halitosis	0.90	0.15	83.33	0.44	0.09	7.5	<0.001
Pricking Pain	1.65	0.15	93.75	0.51	0.11	13.0	<0.001

Table No – 14 Showing Assessment of Parameters in Group B at First Follow up

Parameter	Mean BT	Mean AT	% of Improvement	SD	SE	T	P
Dysphagia	1.4	0.8	42.85	0.50	0.11	5.3	<0.001
Redness in Mucous membrane	1.5	0.95	36.66	0.51	0.11	4.8	<0.001
Fall in temperature	1.4	0.75	46.42	0.48	0.10	5.9	<0.001
Enlarged Tonsils	1.3	0.90	30.76	0.50	0.11	3.5	<0.01
Enlarged lymph node	1.2	0.80	33.33	0.50	0.11	3.5	<0.001
Halitosis	0.85	0.60	29.71	0.44	0.09	2.5	<0.001
Pricking Pain	1.60	0.90	43.75	0.47	0.10	6.6	<0.001

Table. No – 15 Showing Assessment of Parameters in Group B at Second Follow up

Parameter	Mean BT	Mean AT	% of Improvement	SD	SE	T	P
Dysphagia	1.4	0.25	82.14	0.87	0.19	5.8	<0.001
Redness in Mucous membrane	1.5	0.55	63.63	0.22	0.05	19.0	<0.001
Fall in temperature	1.4	0.30	78.57	0.30	0.06	15.9	<0.001
Enlarged Tonsils	1.30	0.35	73.07	0.22	0.05	19.0	<0.01
Enlarged lymph node	1.2	0.35	70.83	0.36	0.06	10.3	<0.001
Halitosis	0.85	0.20	76.47	0.48	0.10	5.9	<0.001
Pricking Pain	1.60	0.45	71.87	0.36	0.08	14.0	<0.001

Table. No – 16 Showing Assessment of Parameters in Group B at Third Follow up

Parameter	Mean BT	Mean AT	% of Improvement	SD	SEM	T	P
Dysphagia	1.4	0.20	85.71	0.69	0.12	7.71	<0.001
Redness in Mucous membrane	1.5	0.3	80.0	0.52	0.13	10.25	<0.001
Fall in temperature	1.4	0.20	85.71	0.41	0.15	13.07	<0.001
Enlarged Tonsils	1.3	0.20	84.61	0.30	0.13	15.98	<0.001
Enlarged lymph node	1.2	0.25	79.16	0.39	0.13	10.78	<0.001
Halitosis	0.85	0.20	76.47	0.48	0.12	5.9	<0.001
Pricking Pain	1.60	0.25	84.37	0.48	0.13	12.33	<0.001

In the present study, there was no statistical significant difference found in Dysphagia, Redness of Mucous Membrane, Fall in Temperature, enlargement of Tonsils, Enlargement of Lymph Nodes, Halitosis and Pricking Pain between the groups. Thus it can be concluded that both the groups were effective, but by seeing overall results Group A (Indukanta Yoga) showed better results than Group B (Darvyadi Yoga).

Follow up on 15th Day:

During treatment and during follow up period children attributed to strict observance of diet.

During treatment and follow up period adverse effects of the drugs was not noted in any of the children.

On 15th Day there was no recurrence of the disease in any of the children.

Table No. 17 Showing Overall Results

REMARKS	GROUP A	PERCENT	GROUP B	PERCENT
Marked relief Above 75%	18	90	18	90
Moderate relief 50-74%	1	5	2	10
Mild relief 25-49%	1	5	0	0
No relief 0-24%	0	0	0	0

Over All Effect:

Overall effect of the treatment showed 90% marked improvement in both the Groups. In

Group B 10% were moderately improved. In Group A 5 % were moderately improved and 5 % were mild improved.

Discussion of formulation: The drugs were administered in syrup form. No other form of medicine is so accepted by Paediatric patients. Children in routine practice quite often reject even Avleha, considered the best in therapeutic forms for Paediatric patients due to its palatability and acceptability. The method of preparation of syrup has given rise to some basic questions. Usually the pharmacology of a drug or a combination is interpreted in terms of the Rasa, Guna, Virya andVipakaof the individual ingredients.As per the directions given in CharakSamhita, regarding the addition of adjuvant to enhance the palatability or acceptability of therapeutic forms it has been emphasized that the Viryaof the adjuvant should not hamper the Viryaof the main drug[12].

Since syrups are not described in any of the classical text books of Ayurveda, it is being pointed out by many scholars that sugar is to be considered as an active ingredient and it should not be that much in quantity so that the efficacy of the drug is affected[13]. Moreover it has also been a matter of discussion that sugar will worsen the pathology in respiratory infections and syrups are not suitable for such conditions. In modern pharmacology, sugar is considered as an inert media. Nowhere in the textbooks of modern pharmacology had it mentioned that sugar has anything to do with either respiratory infection, the absorption of the drug or action of the active ingredients. In the preparation of syrups in the present study our consideration was on the active principles. What Charak has mentioned was the adjuvant should not be having an opposite therapeutic effect so that the main action of the drug is hampered. This postulation is important even in today's context. But measures are to be taken to get the things standardized to see the extent of the effect of the sugar or adjuvant added in terms of the disease pathology, drug absorption or drug efficacy.

Discussion on probable mode of action of drug:

In the present study Tundikeri was treated with internal administration of Indukanta Yoga and Darvyadi Yoga.

IndukantaYoga: IndukantaGhritas described in Sahasrayoga, an authentic textbook of pharmaceutical preparations widely followed in South India. Due to the high efficacy in many diseases, its two forms Ghritaas well as Kwathaare being prescribed in conditions like Vatarogas, Kshaya, Udara, GulmaandSannipatajwara. According to the text, it is Balavardhakaalso. A good number of studies conducted in academic institutes and others have proved that both these forms of medicine are able to prevent the recurrence of respiratory infections. The ingredients of Indukanta Yoga consist of Dashamoola, Panchakola, Yavakshara, Putikaand Devadaru. The combination is not directly indicated in Kasaor Shwasa. But due to the indications in Kshayaand Sannipatajwaraand as mentioned Balavardhaka, it is used in all types of respiratory infections. Analysis of the ingredients of Indukantashows that it is an excellent combination of anti-inflammatory, carminative and digestive drugs.

Darvyadi Kwatha:

Darvyadi Yoga has been explained in AstangaHridyaUttaratantra under MukharogaChikitsa. This Yoga contains Devadaru, Nimbatwak, Takshya (Rasanjana) and KutajaBeeja. It has been indicated in all types of Mukharoga. Analysis of the ingredients shows that it is an excellent combination of anti-inflammatory and anti-pyretic drugs.

This was the concept postulated by Charakwhen he explained Viryaas the potency of the drug in the quotation[14]. This was well substantiated by Chakrapanisaying whatever it is called Rasa, Guna, Vipakaor Prabhava the action or effect of a drug should be attributed to Virya. Moreover this is the only explanation for the postulation of ancient scholars that drug may act by virtue of its Rasa, any of its Guna, Vipaka, Viryaor Prabhava[15]. When they experienced the action of drug, and they were to make the postulations regarding the pharmacodynamics of the drugs, they tried to interpret this in terms of the available parameters Rasa, Guna, Viryaor Vipaka. When these parameters failed, they tried to explain it in terms of extraordinary combination of five Mahabhutasin the drug i.e. Vichitrapratyayarabdha[16]. In conditions where this also didn't suit they attributed the same to the unknown factor Prabhava. In acombination where the effect could not be explained in terms of combination of the effects of the individual ingredients, the concepts of AvayavaPrabhavaand SamudayaPrabhavawere introduced[17]. From all these it could be concluded that the ancient scholars realized a factor or a group of factors in a drug or a combination which is solely responsible for the potency of the same. This was the real consideration behind Virya. Moreover, an effect is the combination of various factors. These factors may not be able to produce the effect individually or independently. Drugs or combinations that can work against any of these components can produce the desirable effects in a particular situation. In the case of infections of children the improper status of Agni, the decreased immune responses (Bala) as well as a decrease in the enriched status of Dhatusaltogether contributes to the recurrence of the infections. One particular factor alone may not be able to produce the same. In such conditions, a drug that can improve the general immunity as well as another drug that is a known anti-inflammatory can produce the same results.

CONCLUSION

Tundikeri is a KaphaRaktapredominant disorder, which can be compared with Acute Tonsillitis of contemporary science. The formulations, Indukanta Yoga and Darvyadi Yoga are proved to be used as a safe drug in Paediatric practice without any adverse reactions, effective, economical, safe and also free from all side effects.Both the Groups are showing significant effect on all the symptoms of Tundikeri and among them Group A (Indukanta Yoga) showed better results than Group B (Darvyadi Yoga).

REFERENCES

1. Yadavaji Trikamaji, editor, Commentary: Nibandh Sangrah of Dalhana on Sushruta Samhita of Sushruta,Nidana Sthana, Chapter16, verse no. 42, 1st edition, Varanasi: ChaukhambaSurbharati Publication;2012;p.333.
2. Yadunandana Upadhyaya, editor, Commentary: Vidyotani of Kaviraja Atrideva Gupta on Ashtanga Hridya of Vagbhatta, Uttara Sthana, Chapter21, verse no. 47, 1st edition, Varanasi: Chaukhamba Prakashan;2012;p.712.
3. Yadunandana Upadhyaya, editor, Commentary: Vidyotani of Kaviraja Atrideva Gupta on Ashtanga Hridya of Vagbhatta, Uttara Sthana, Chapter22, verse no. 54, 1st edition, Varanasi: Chaukhamba Prakashan;2012;p.719.
4. Yadavaji Trikamaji, editor, Commentary: Nibandh Sangrah of Dalhana on Sushruta Samhita of Sushruta, Sutrasthana, Chapter21, verse no. 36, 1st edition, Varanasi: Chaukhamba Surbharati Publication;2012;p.106.

5. Yadavaji Trikamaji, editor, Commentary: Nibandh Sangrah of Dalhana on Sushruta Samhita of Sushruta, Nidana Sthana, Chapter16, verse no. 42, 1st edition, Varanasi: Chaukhamba Surbharati Publication;2012;p.333.
6. Sahasrayoga of Ram nivas sharma & S.K. Sharma, Reprint, Delhi; Chowkhambha Sanskrit Pratishthan;2012;p.42.
7. The Ayurvedic Pharmacopoeia of India of Govt. of India, Vol. 1, 1st edition, Delhi; Controller of publication;2001;p.199.
8. DarvyagunaVijnana of P.V. Sharma, Vol.2, 2nd Edition,Varanasi: Chaukhamba Bharti Academy;2009.
9. Yadunandana Upadhyaya, editor, Commentary: Vidyotani of Kaviraja Atrideva Gupta on Ashtanga Hridya of Vagbhatta, Uttara Sthana, Chapter22, verse no. 54, 1st edition, Varanasi: Chaukhamba Prakashan;2012;p.719.
10. Yadunandana Upadhyaya, editor, Commentary: Vidyotani of Kaviraja Atrideva Gupta on Ashtanga Hridya of Vagbhatta, Uttara Sthana, Chapter22, verse no. 54, 1st edition, Varanasi: Chaukhamba Prakashan;2012;p.719.
11. Commentary: Jivanaprada of Shailja Srivastava on Sharangadhara Samhita of Sharangadhara, Madhyam khand, Chapter2, verse no. 1-2, 1st edition, Varanasi: Chaukhamba Orientalia;2009;p.127.
12. Gangasahaya Pandeya, editor, Commentary: Vidyotani of Kasinatha Sastri on Charak Samhita of Agnivesha, Kalpa Sthana, Chapter12, verse no. 45, 1st edition, Varanasi: Chaukhamba Sanskrit Sansthan;2009;p.861.
13. Gangasahaya Pandeya, editor, Commentary: Vidyotani of Kasinatha Sastri on Charak Samhita of Agnivesha, Kalpa Sthana, Chapter12, verse no. 46, 1st edition, Varanasi: Chaukhamba Sanskrit Sansthan;2009;p.862.
14. Gangasahaya Pandeya, editor, Commentary: Vidyotani of Kasinatha Sastri on Charak Samhita of Agnivesha, Sutra Sthana, Chapter26, verse no. 65, 1st edition, Varanasi: Chaukhamba Sanskrit Sansthan;2009;p.513.
15. Yadunandana Upadhyaya, editor, Commentary: Vidyotani of Kaviraja Atrideva Gupta on Ashtanga Hridya of Vagbhatta, Sutra Sthana, Chapter9, verse no. 22-23, 1st edition, Varanasi: Chaukhamba Prakashan;2012;p.108.
16. Yadunandana Upadhyaya, editor, Commentary: Vidyotani of Kaviraja Atrideva Gupta on Ashtanga Hridya of Vagbhatta, Sutra Sthana, Chapter9, verse no. 28, 1st edition, Varanasi: Chaukhamba Prakashan;2012;p.109.
17. Gangasahaya Pandeya, editor, Commentary: Vidyotani of Kasinatha Sastri on Charak Samhita of Agnivesha, Sutra Sthana, Chapter26, verse no. 67, 1st edition, Varanasi: Chaukhamba Sanskrit Sansthan;2009;p.514.

Cite this article as: Gaur Amit, Agarwal Riju, Dhiman K S, Rani Manju, Pandey Ruchi. A clinical study on efficacy of indukanta yoga and darvyadi yoga in tundikeri w.s.r. To acute tonsillitis. Journal of Ayurveda and Holistic Medicine.2014;2(5).18-30

Source of support: Nil, Conflict of interest: None Declared.