SUMMARY & CONCLUSION
SUMMARY AND CONCLUSION

Inspite of all round development in the medical research, the problems of Bronchial Asthma still remains a challenge before medical scientists. This is a chronic disease of course Paroxysmal in nature, highly horrifying to the patient, as well to the physicians. All times, one has to observe as a helpless spectator; other aspect is that it has a very high incidence i.e. 0.5-2x (Harve) affecting every country inspective of age and sex. A humble attempt has been made in this work to study the nature of this disease in a small series of cases and to treat them with an indigenous drug - Albizzia Lebbeck (Siris).

The whole work has been presented broadly in three parts presented by small introduction, and followed by a summary and bibliography. 1st part deals with the literary review, which includes modern review, review of Ayurvedic literature and a brief view regarding the drug. Modern review has been presented to assess the present status of the disease from different angles; mainly aetiology Pathogenesis and treatment. In nutshell, still the aetiology is unsettled, genetics, allergy, Psyche, infection, hormones etc. are being identified. However, the concensus has been created to believe that more than one factor may be involved in an individual at one hand; genetics may predispose a sensitivity and on the other hand, rest of the factors may be precipitating the entire phenomenon, as Kagan (1976) has supported the relationship between certain psychological and allergic variable in childhood Asthma.
As far as Pathogenesis concerned it has been highlighted that bronchospasm, the chief-pathology producing the clinical manifestations in the net result of cholinergic and adrenergic activities, the former tends to constrict the bronchi and the latter relaxes it. It is only the predominance of cholinergic activity which is the main culprit. As the cholinergic activity increases, the body attempts to raise the adrenergic activity as far as possible, as soon as the former predominates, the entire realm of Pathology is precipitated. The several chemical substances e.g. histamine, SRS-A, 5-Hydroxytryptamine, bradykinin, etc. liberated in the body are responsible to stimulate the cholinergic activity, which are guided by aetiological factors describe above. Any small incident, as cold wave, dust, a little stress etc. may trigger the entire phenomenon.

The management of bronchial Asthma is being tried to counteract the pathogenesis at different levels. At the outset attempt is being made to desensitise the patients. So, that triggering factors may not have any influence. The second attempt is to identify the aetiological factors and to combat is at the level, which includes the treatment of infection, management by Psychotherapy, corelation of normal derangement etc. Though the histamine like other substance are the chief chemical mediators, at the antihistamine have not much role to play. Once the pathogenesis is in process any amount of anti-histamine is not able to counteract it. Then only measure to available is to enhance the adrenergic activity or to supplement corticosteroid from out side. The cholinergic activity by anticholinergic drugs also suffers to great limitations. The
supplementation of adrenergic therapy equally suffers limitations in beta-adrenergic blocker and from several side reaction. The only medicine at our rescue remains the steroid therapy and a few bronchodilator corticosteroid are supposed to act at all levels of disease phenomenon. Corticosteroid render the mast cells of bronchial mucosa less sensitive to histamine and like substances and on the other hand, its anti-inflamatory property helps in reducing the narrowing of the bronchi, where as bronchodilators like aminophylline simply help in dilatation of bronchi, by relaxing the smooth muscle directly. Steroid therapy, in addition to several side reaction and toxicity, makes the patient drug dependent. The dose of the drug goes on increasing, and the formation of cortisol in the body of the patient is almost suppressed via the feed back mechanism. Thus, it is obvious that inspite of our best afforts, the modern treatment available is not the real answer to the disease, and no single treatment is enough for a patient as it is not specific.

With the review of Ayurvedic literature, it has been observed that the ancient Physicians have tried to visualise a common mechanism of several type of Dyspnoea and Tamak Swasa (Bronchial Asthma) has been considered to be type of Asthma. Regarding the aetiological factors, climate variations, dietic descriptions and environmental factors etc. have been attributed to be responsible for the precipitation of the disease.

As far as tridosa concerned, Vata and Kapha are considered to be predominated in the pathology, probably forever causing narrowing,
due to spasm, and the later due to secretion and inflammation of bronchial mucous membrane, of course the vitiation of Pitta Sthana has been described to be the root cause. It indicates towards the derangement of certain enzymic or hormonal activities which result into further changes, leading to the narrowing due to spasm, caused by vata or due to secretions and inflammation of the bronchial mucosa.

So logically the drug administered for the treatment of bronchial Asthma, should be able to overcome Vata and Kapha, for symptomatic relief, and should stimulate pitta for a permanent effect. Keeping this in mind, the review of Ayurvedic literature was done to find out a suitable drug for clinical trial. Siris have been advocated to be the best visaghana dravya, and recommended for several types of insect and animal bites. It has been recommended for treatment of several types of skin disorders. In addition it has been said to be useful for the patient of Swasa. All the three conditions describe above have some relation with chemical mediators - histamine and like substances. Preliminary Pharmacological studies have also shown anti-histaminic property in this drug. So these was prima facie case to investigate the effect of A. Lebbeck in the management of bronchial Asthma.

In the IIInd part of the thesis clinical study has been done are 60 cases of Asthma. Diagnosis of bronchial Asthma was mainly done on clinical basis, of course with the aid of day to day laboratory investigations - T.C., D.L.C., X-Ray chest etc. to exclude the other Pathological conditions of the lungs and heart.
It has been observed that total leucocyte count was on higher side of the normal range and total eosinophil count was raised than normal. ESR was also high. A seasonal relation was also obvious in this series the maximum cases were recorded in the month of August. Of course the higher trends were always available throughout the winter as compared to summer season.

Siris (A. Lebbeck) decoction was administered orally in the dose of 25ml. 4 times daily for one month. A quick response was recorded relief in about 83.33% of cases.

A few objective Parameters were also adopted to assess the results i.e. respiratory rate, breath holding time, vital capacity, forced expiratory volume in 1 second (FEV₁). All round improvement was noted in relieved cases mentioned above i.e. respiratory rate decreased, breath holding time increase vital capacity and forced expiratory volume in 1 second (FEV₁) both increased after treatment. Blood T.C. Eosinophil count, ESR also decreased after treatment in relieved cases.

Thus Siris (A. Lebbeck) has shown good result in case of bronchial Asthma.

This study suffers from a few limitations i.e. clinical series, and long term follow up. But this is sure that this will pave the path of future workers, who will find to be an interesting problem for clinical as well as Pharmacological study.
CONCLUSION

Prevalence of Bronchial Asthma was found in winter season with a male prepondarence. Most of the cases responded quickly to oral administration of Siris kwath showing improvement in respiratory functions viz. decrease in respiratory rate, increase breath holding time, increase in forced expiratory volume and improvement of vital capacity. Even lowering of ESR and decrease of Leucocytic and Eosinophilic count were observed. Hence, it may be inferred that A. Lebbeck(Siris) is an useful drug in the management of Bronchial Asthma. Ofcourse further study taking up large number of cases with long term follow up is necessary to come to a definite conclusion.