CHAPTER 1

INTRODUCTION
Yoga, the divine gift to the mankind was developed by the great Indian sages to realize one’s own nature. Yoga is an ancient science prevalent from time immemorial. Historical evidences of yoga can be seen in ancient Indian literatures like *Vedas, Upanisads, Smritis, Epics* and *Purānas*. Even though several sages contributed to the development of yoga, sufficient literatures related to them are not available before Maharshi *Patañjali*. *Patañjali* worked extensively in the field of Yoga and he collected, synthesized and put forwarded the principles of yoga to us in the form of yoga *sūtras*, which is a master piece in Yoga, commonly known as “*Patañjala Yoga Sūtras*.” Therefore we consider him the father of Yoga. After his period, great personalities like Shankaracharya, Ramanujacharya and Madhvacharya contributed a lot to the development of yoga system. Great *Bhaktiyogis* like Suradas, Purandaradas; *Hathayogis* like Matsyendranatha, Goraksanatha, Svātmārāma; *Rājayogis* like Sadashivabrahmendra Saraswathi, Swami Vivekananda and many more yogis have given their contributions to develop the system of yoga by their dedicated work in the field.

The system of yoga, on one hand is a theoretical study and on the other, it is a practical step for self-realization, the ultimate aim of Yoga. There are various means to achieve self-realization. These different ways can be considered the schools of yoga. The various schools of yoga include *Rāja yoga, Hatha yoga, Jñāna yoga, Karma yoga, Bhakti yoga, Mantra yoga* and *Kundalini yoga*. ‘Yoga Shastra’, the science of Yoga has to be studied systematically to realize the hidden truth in this great ancient science. The
main objective of science is to study and understand the subject with proofs. Most of the sciences try to understand the subject externally by observing from outside. Yoga seeks to understand both external and internal aspects of the subject.

Maharshi Patañjali defines yoga as ‘yogah cittavṛtti nirodah’.¹ He explained various therapeutical aspects in his yoga sūtras. We can develop these concepts for curative, preventive and promotive aspects in relation to health. Patañjali explains about the distractions of the mind and the development of disease (vyādhi), their symptoms and method to overcome them.² Classical yogic texts like Hathapradīpika, Gheranda Samhita and Śiva Samhita describe different yogic techniques to overcome various disorders of body and mind. For example, Hathapradīpika says Neti cleanses the frontal sinuses, bestows perfect vision and soon destroys the multitude of diseases of the region above the shoulders.³ Śiva samhita describes Svastikāsana as an auspicious and beneficial practice useful to overcome all diseases.⁴ Practicing Bhastrikā pranāyāma can redeem the body from all the diseases and kleśas and day by day the practitioner will gain in health, says Gheranda Samhita.⁵ These are some of the examples. One can find various such references in classical yogic texts. We can systematically adopt these therapeutical values in the cure, prevention and management of the diseases. Healing the health problems using the techniques of yoga is called ‘Yoga Therapy’. In yoga therapy, explicitly one has to find out the suitable set of āsanas observing the patient carefully.⁶ Implicitly this concept can be used in other yogic practices also.
The spiritual and scientific discipline of yoga is the most precious gem of our cultural heritage and is being practiced in India for thousands of years. Yoga is an effective and time tested method for improving our health as well as to cure and prevent the diseases. Recently, there has been an increased awareness in health through natural methods like yoga in all parts of the world. The origin of the most of diseases is in the mind according to yogic thought. The mind influences the body in every possible way. Distractions of the mind effect the physical body and which in turn imbalances the normal body functions and leads to diseases. More than 79% of diseases are so called psychosomatic diseases, they originate in the mind; the causes being in the mind and manifest in the body. Day by day; such psychosomatic diseases are increasing by the influence of modern lifestyle. Yoga is the unique solution, which can directly control the mind and helps to maintain healthy body and mind. With its multifold advantages Yoga is becoming more popular as a therapeutical science against other conventional therapies. Holistic approach of yoga has the potentiality to heal the patients to the grass roots of their ailments.

Research in yoga therapy is very essential to assess and standardize the efficacy of yogic techniques in the treatment and to understand their potentiality in curing and prevention of various diseases which may be physical, mental or psychosomatic. A lot of research is undertaken in various aspects of yoga in relation to health, disease, physiological and psychological benefits of yoga. Even then more and more systematic scientific research studies have to be done with sufficient subjects and control groups to assess
and standardize the efficacy of yoga therapy. There is a scarcity of parameters
to show the extent of improvement achieved by yoga therapy. It is the common
experience that every patient feels the improvement, feeling of relief and
freshness after yoga therapy. But there is a difficulty to measure it
quantitatively using scientific parameters available at present in most of the
cases. One can see that most of the research studies are done without proper
parameters. Therefore there is a need to develop new parameters on scientific
ground for the assessment of effect of yogic practices in the treatment.

The present research work is a unique scientific approach to assess and
standardize the effect of yoga therapy. For this purpose, the assessment of the
effect of yoga therapy on sinusitis is undertaken. The assessment is done by
using Infra Red Thermal Imaging System (IRTIS) along with conventional
parameters.

Sinusitis is an inflammatory disorder of the nasal sinuses. Most of the
persons who suffer from sinusitis, chronic cold and other disorders of the nasal
cavity very often do not get substantially relieved by the medical treatment
available at present. The available treatment consists of some vasoconstrictors
for decongestion of the nasal mucous membrane, antibiotics to fight against
infection and general and constitutional treatment. Many a time sinus operation
or operation for the deviated septum is done. But the trouble recurs sooner or
later.8

Any unwanted thing which the body generates should be thrown out as
early as possible from the body. If not, it becomes impure and gives the space
for the development of many foreign bodies like viruses and bacteria. Therefore, stagnation of mucus in the nasal sinuses leads to Sinusitis by the occupation of these foreign bodies. Here one can think of Yogic techniques which can eliminate these impurities from the body. ‘yogāṅnustānādaśuddhiṣaye jñānadiptirāvivekakhyāteḥ’ says Pātañjala Yogasūtra.9 Yoga can be effectively used to cure sinusitis and can work as a preventive therapy by increasing the body resistance against the causative factors. Neti and Kapālabhāti are the cleansing techniques mentioned in Ḥathayoga, recommended for the health of the nasal sinuses and the nasal passages.10 Some work has been carried out so far to verify this claim.11 Modern medical world also adopted Jalaneti, the nasal cleansing technique of yoga by the name ‘nasal wash’ in various nasal conditions like sinusitis after 1980.12

The present available references show that even though several studies on the effect of Yogic techniques on Sinusitis have been done, no study is conducted with proper parameters for evaluation. The proper assessment of the effect of yoga therapy on sinusitis is not done so far as our knowledge. The assessment of yoga therapy is necessary to understand the efficacy of yoga therapy. Only with proper assessment, one can develop the yoga therapy.

The present study intends to assess the improvement by using Infra Red Thermal Imaging System (IRTIS) along with normal parameters. Use of thermograph is totally new in the field of yoga research. There is no such instrument which can assess the effect of yoga in each level of the therapy.
Therefore, the present research work entitled ‘Assessment of the Effect of Yoga Therapy on Sinusitis using Infra Red Thermal Imaging System’ is a scientific approach to assess and standardize the effect of yoga therapy. The instrument IRTIS-200 is brought from Russia to the Department of Human Consciousness and Yogic Sciences, Mangalore University under the project sanctioned by the Department of Science & Technology, Government of India. The study is done under the guidance of Dr.K.Krishna Bhat, Professor and Chairman of the department.

The main objective of the study is to assess the effect of yoga therapy on Sinusitis by using Infra Red Thermal Imaging System. At the same time, it is intended to prove it by using blood tests. Present research study also intends to show the Infra Red Thermal Imaging System can be used to diagnose the sinusitis condition and can be used as a parameter to assess the efficacy of yoga therapy.

References

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9. *Pātañjala Yogasūtra*, 2nd chapter, 28th sūtra


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