

## Editorial

### Yoga for Madhumeha (Diabetes Mellitus)

Ayurveda describes Madhumeha under Asthmagada (eight major diseases) and is one of the oldest documented disease. It is described as a disease in which the patients urine is sweet as honey, quantitatively increased and of Kashaya rasa, Aruna varna and Ruksha in guna or quality. Since the ancient times management of Madhumeha has been through a multi-pronged approach which includes diet modification, drug prescription, behaviour modification and control of psychosomatic factors. Modern life style though physically comfortable is mentally stressful and is blended with faulty dietary habits and poor physical activity which are risks for diabetes.<sup>[1]</sup>

Globally 387 million people aged 20 to 79 years are living with diabetes and 46.3% of them remain undiagnosed. The diabetes affected is expected to further rise to 592 million by the year 2035. Around 4.9 million deaths occur per year due to diabetes and 50% of them being among those aged under 60 years.<sup>[2]</sup>

In this context consideration of Yoga with life style modification and ayurveda has special emphasis in the control and management of stress. Mind plays important vital role in stress. Yogah Chitta vritti Nirodha-It means the Yoga can control the mind. Different Yoga asanas like Suryanamaskara, Parivritta Trikonasana, Paschimottanasana, Ardha matsyendrasana, Ushtrasana, Bhujangasana, Dhanurasana, Sarvangasana, Matsyasana Halasana are found to be successful as an alternative treatment for psychological disorders in the relief of stress and anxiety. Yoga by successive stimulation and relaxation controls the mind and harmonises the body. Yoga is ideally suited for both type 1 and type 2 diabetes. In type 1 diabetes asanas help to prevent the requirement of insulin over the years. In type 2 diabetes asanas help to normalize blood sugar due to the high intensity workout.

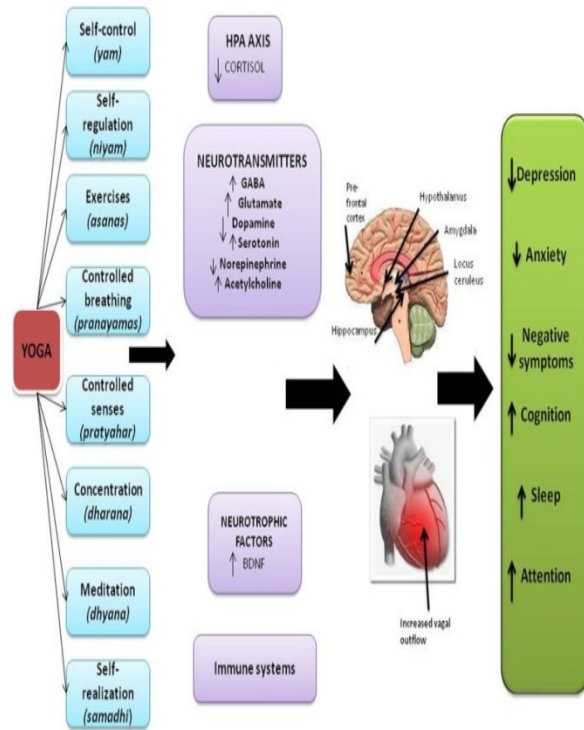
Yogic exercises can either be of high or low intensity, depending on the clinical condition. Young active diabetics can be made to practice very intense asanas in dynamic manner, which will increase the cellular activity of the muscle, which needs more sugar. The advanced asanas require a lot of energy and this helps normalize blood sugar but, if the person is obese, asana practice is difficult and it is easier to reduce weight by other means and then take up Yoga. The force of arterial flow can be increased and directed to any organ, which is of immense use in the diabetic state. In standing poses, the skeletal muscles increase their uptake of sugar. Hence, the tissues retain insulin sensitivity. Capillary changes are easily prevented by Yoga as the action is on the vessel wall. Yoga is microcellular in its action. As the internal organs are massaged, sensitivity to insulin and uptake of sugar are enhanced.<sup>[3]</sup>

Twisting poses squeeze the intestines and massages them. Hence, stagnation of colonic contents due to autonomic dysfunction cannot occur. Asanas also pressurize the pancreas in an effort to improve the secretory status. The massage of the pancreas by forward bends and twisting helps to release more insulin in response to food. The part of Yogic practice Pranayama are helpful in different ways. Pranayama definitely increase the natural immunity of body and vital capacity of lungs.

- Pranayama is highly valuable for improving oxygen perfusion to tissues.
- As it also removes stress on the system, progression of blockage is arrested.
- Oxygen delivery to the tissue is systematic and sure. Tissue hypoxia never occurs.<sup>[4]</sup>
- Sympathetic and parasympathetic stabilization prevent autonomic dysfunction.

It is very useful for all complications of the diabetic state particularly cardiac auto-

nostic dysfunction, retinopathy and peripheral arterial occlusive conditions. The pathways of relieving stress can be depicted as below.<sup>[5]</sup>



In conclusion Yoga can play immense role in controlling the stress of day to day life and it helps diabetic patients in reducing morbidity. It leads to better physical and mental

health and can be adopted as a routine practice for maintenance of glycemic control in diabetics.

## References

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