

The Effect of Tea in Cerebrovascular Disease

Pahari Ghosh¹, Amar Kr Misra², Anup Kr Bhattacharya³, Namrata Trivedi¹, Arindam Ghosh³, Ipsita Ghosh, Tapash Rudra¹, Rakesh Roy¹ and Sanjay De¹

¹*Ramakrishna Mission Seva Pratishthan, Vivekananda Institute of Medical Science,
99, Sara Bose Road, Kolkata 700 026, West Bengal, India*

²*North Bengal Medical College, West Bengal, India*

³*Mata Gujri Memorial Medical College, Kishanganj, West Bengal, India*

⁴*NRS Medical College and Hospital, Kolkata, West Bengal, India*

KEYWORDS Flavonoids. Ischemia. Hyperglycemia. Cholesterol. Low Density Lipoprotein

ABSTRACT Tea is the most widely consumed human beverage and rich in flavonoids, which causes significant endothelium dependent vasodilatation. Aims are to study the effect of tea drinking in subjects with ischemic stroke and metabolic syndromes. A total of 1100 stroke patients were selected from indoor/ outdoor department of Ramakrishna Mission Seva Pratishthan and other Hospitals of Kolkata from last three years. Individuals between 40 to 80 years of age were recruited. Clinical and biochemical examination were conducted in each case at the onset and every 6 months interval. Individuals stable on existing medications were advised to continue the same unless situation demands dose modification or withdrawal. Methods of tea preparation were detailed to study participants and they were asked to take ≥ 3 cups (each cup contains 150 ml of tea /day. Out of 1100 participants, 787 were men and 313 were women and the mean age was 61.62 ± 11.02 . Tea drinkers constituted 95.09% of total study individuals. At second follow up, 773 subjects were regular in attendance and 9 died. The most preferred type of tea ingested was decoction (53.64%). Significant ($p < 0.001$) decrements were noticed in systolic blood pressure, Body Mass Index (BMI), fasting blood glucose and Low Density Lipoprotein (LDL) level when compared between base line and consecutive visits. Tea consumption of 450 ml or more (≥ 3 cups)/day was associated with reduction of the incidence of recurrent ischemic stroke, significant decrement of systolic blood pressure, better control of fasting hyperglycemia, and lowering down of the level of total cholesterol and Low Density Lipoprotein level in subjects with hypercholesterolemia. Further investigations are needed to corroborate our observations.