TITLE OF THE THESIS
“Chemical And Medicinal Evaluation of Different Putas of Louha Bhasma (Iron)”

ABSTRACT OF THE THESIS

The research work entitled, “Chemical and Medicinal Evaluation of Different Putas of Louha Bhasma (Iron)” for the degree of Doctor of Philosophy under the University of Calcutta consists of different aspects of study on Kaphaja Pandu vis-à-vis Iron deficiency Anaemia and effect of a specialized preparation of iron in Ayurvedic procedures in the domain of chemical analysis, pharmacological evaluation and clinical study. Louha Bhasma was prepared in accordance with description of Ayurveda with slight modification and chemically screened with the help of AAS, EDX, WDXRF, IR,LD, HPLC and HPTLC. Many trace essential and beneficial elements like Mg, Ca, Na, Al, K, Mn, Zn, Ni, Cu, etc. and several bio-active constituents like polyphenols, galactonoids, purine, gallic acid complex were found in the preparation. Pharmacologically, 50, 100 and 150 puta varieties of Louha Bhasma was tested for toxicity study as well as efficacy study was screened in Wister strain albino rats on iron deficient agar gel model with phlebotomy. It has been observed that no varities of Louha Bhasma had any adverse effect and treatment with 150 puta of Louha Bhasma could be able to regenerate Hb%, RBC, PCV, MCV, MCH, MCHC, serum ferritin, serum & decrease TIBC significantly (p<0.05). Clinical study of 150 puta varieties of Louha Bhasma in 39 patients of iron deficient anaemia showed significant improvement (p<0.05) of Hb%, RBC, PCV, MCV, MCH, MCHC, serum iron, serum ferritin, TIBC, IgG, IgA and IgM. Present research work is aimed for scientific exploration of unique technique of Ayurveda under modern parlance towards the benefit of human being.

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