Poster Presentation

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Physical Analysis of Kidney Stones:Metabolic Basis and Physical Practice

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The kidneys play an important role in eliminating waste products from the body. Kidneys are a major source of morbidity and health care expenditure. They play an equally vital role in conservation of salt and water as the regulation of body's "internal environment". The past century has witnessed remarkable technological advances in the treatment and removal of Kidney Stones. Artificial Kidney and transplantation of Kidneys are today's reality, but advanced in prevention have been delayed by the incomplete understanding of what causes of stone formation. It is still unclear that how the Kidney Stones are grown in Kidneys. Investigation of kidney stone is based on urine chemistry, rather than physical analysis of stone itself. Such investigations does not explain the pathophysiology of stone formations. Chemical analysis and investigations can only be determines radical and ions but cannot resolve the crystalline entities. The present communication is an attempt to collect and prepared a huge data base for such samples. Naturally grown and surgically removed kidney stones were collected from various urological hospitals of Gujarat State with prescribe format. Such samples were analyzed with data analysis, and sophisticated physical tools like Scanning Electron Microscopy(SEM), Electron Dispersion Analysis by X-Rays(EDAX), Etching studies of such samples were made using inhibitor drug component as an Etchant.

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