

A Review on Future of Plant Based Medicine in Treatment of Urolithiatic Disorder

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Abstract : Urolithiasis is a condition in which insoluble or less soluble salts like oxalate, phosphate etc. precipitate in urinary tract and causes obstruction in ureter resulting renal colic or sometimes haematuria. It is the third most common disorder of urinary tract affecting nearly 2% of world's population. Poor urinary drainage, microbial infection, oxalate and calcium containing diet, calciferol, hyperparathyroidism, cysteine in urine, gout, dysfunction of intestine, drought environment, lifestyle, exercise, stress etc. are risk factors for urolithiasis. Wide ranges of treatments are available in allopathic system of medicine but reoccurrence is unpreventable even with the surgical removal of stone or lithotripsy. So, people prefer alternative medicinal systems such as Unani, homeopathic, ayurvedic etc. systems of medicine due to their fewer side effects over allopathic counterpart. Different plants based ethnomedicines are being well established by their continuous effective use in human since long time in treatment of urinary problem. Many studies have scientifically proved those ethnomedicines for antiurolithiatic effect in animal and in vitro model. Plant-based remedies were found to be therapeutically effective for both prevention as well as cure of calcium oxalate urolithiasis. Plants were known to show these effects through a combination of many effects such as antioxidant, diuretic, hypocalciuric, urine alkalinizing effect in them. Berberine, triterpenoids, lupeol are the phytochemicals established for antiurolithiatic effect. Hence, plant-based medicine can be the effective herbal alternative as well as means of discovery of novel drug molecule for curing urolithiatic disorder and should be focused on further research to discover their value in coming future.

Keywords : urolithiasis, herbal medicine, ethnomedicine, kidney stone, calcium oxalate

Conference Title : ICAM 2018 : International Conference on Alternative Medicine

Conference Location : Toronto, Canada

Conference Dates : July 19-20, 2018