Evaluation of Safety and Efficacy of Welstone™ Drops in Experimentally-Induced Calcium Oxalate Urolithiasis in Rats

(Advancements in Homeopathic Research, Vol. 11 No.3, August 2026-October 2026, Date of Publication 2026/08/01, Pages no. 20-29 ISSN : 2456-3668 (Print) // EISSN : 2583-5661 (Online) DOI : 10.48165/ ahr.2026.11.3.2)

Dr. Poorva Tiwari[1], Dr. Snigdha Suman Dalua[1], Dr. Praveen Saxena[2], Ramachandran Valavan[3*]
1. Scientific & Medical Affairs Department; Dr. Willmar Schwabe India Pvt. Ltd.
2. Marketing Department; Dr. Willmar Schwabe India Pvt. Ltd.
3*. Scientific, Medical & Regulatory Department; Dr. Willmar Schwabe India Pvt Ltd
Corresponding Author:
Dr. Ramachandran Valavan
MD (Hom), MBA, PhD, Head - Scientific, Medical & Regulatory Affairs,
Mobile: +91 93123 09186,
Email: dr.valavan@schwabeindia.com./
drvalavan@yahoo.com

Abstract

Background

Urolithiasis is a recurrent urinary disorder characterized by crystal formation and deposition within the urinary tract, with CaOx being the predominant stone type. The present study evaluated the safety and antiurolithiatic efficacy of three variants of the homeopathic formulations, with the objective of commercializing the most efficacious and safe formulation under the brand name Welstone™, in an experimental model of urolithiasis. The safety and efficacy of Welstone™ compared with the controls are presented in this paper.

Materials & Methods

Male Wistar rats were allocated into 12 groups (n = 6/group). Urolithiasis was induced using 0.75% v/v ethylene glycol (EG) and 1% w/v ammonium chloride (AC) in drinking water for the initial 7 days, followed by 0.75% EG until Day 28. Three homeopathic formulations were administered orally at low, medium, and high dose levels in 9 different groups from Day 8 to Day 28, while Cystone® (750 mg/kg) served as the reference standard. Treatment effects were assessed through body-weight changes, renal biochemical and mineral parameters, absolute and relative kidney weights, and renal histopathological evaluation.

Results

EG + AC exposure impaired body-weight gain and increased serum creatinine, urea, blood urea nitrogen, uric acid, calcium, phosphorus, and kidney weight, accompanied by marked renal histopathological alterations. Treatment with Welstone™ at low, medium, and high doses attenuated these changes to varying degrees. Welstone™ at the high dose showed the most consistent overall response, with improvement in renal biochemical and mineral parameters, body-weight gain, kidney weight, and preservation of renal architecture, while the Low and Medium doses also improved relative to the disease-control group. The concordance between biochemical improvement and histopathological recovery supports the antiurolithiatic potential of Welstone™ in this experimental model.

Conclusion

Improvements in biochemical parameters and kidney histoarchitecture suggest that Welstone™ has antiurolithiatic potential in EG + AC-induced experimental urolithiasis. Among the doses tested, the high dose of Welstone™ showed the most consistent response, with effects comparable to the standard treatment. Further studies are needed to elucidate its mechanism of action through the assessment of urinary lithogenic factors and quantitative calcium oxalate (CaOx) crystal formation.

Keywords: Urolithiasis; Welstone™; ethylene glycol; ammonium chloride; calcium oxalate; renal function; homeopathy; Wistar rats.