

**Preparation of Ketamine Gel in Different Concentrations and Evaluation the
Skin Irritating Test of this Gel in Rabbits**

Abstract:

Aim: The aim of the present study was to extract pure ketamine powder from ketamine hydrochloride solution.

Materials and Methods: Ketamine powder was prepared from precipitation of ketamine hydrochloride solution. Homogeneous gel from ketamine was prepared at (0.5, 1, 5, 10, and 15)% concentrations. The pH of the different concentrations of the ketamine gel also were measured.

Results: The pH ketamine gel measurement showed that there is no difference between pH in different concentration. The results showed that ketamine gel also is safe to be used topically and not irritant according to the skin irritation test, because the mean value of skin irritation index (SII) for erythema and edema was found to be zero after applied of ketamine.

Conclusion: From this study a ketamine gel can be prepared from ketamine powder and it is safe to be used topically and not irritant according to the skin irritation test.