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**Establishment Percutaneous Administration Method in Beagle Dog**

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The primary routes of drug administration include oral, intramuscular, subcutaneous and intravenous dosing for toxicological risk assessment purpose in dog. There has been an increase applying transdermal patches as an alternate method for systemic delivery. The present study was performed to establish the transdermal delivery method of medicated ointment, liquid and powder material to beagle dog. The test article in liquid was loaded to a gauze of 20 x 20 cm and applied to the back of beagle dog. The gauze was held in contact by occlusive dressing and a jacket for 6 hours. Because the percutaneous administration method is not enforced much yet in toxicity test in dogs, standard performance guide is required. The transdermal drug delivery systems for beagle dog developed in this study can be used for a comprehensive evaluation of the toxic effects of some new chemicals for topical application.

**Keyword :** Transdermal, Percutaneous, Dog, Toxic effects