

Differences of pain anesthetic effect expression on using lidocaine tape in hemodialysis patients.

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It is not necessarily enough to figure out the suitable solution when medical staffs encounter several problems clinically. In case of the solution is unknown and/or pharmaceutical company does not have an information to solve it, faculty staffs in pharmacy may give a suggestion to figure out the suitable solution.

Lidocaine tape is used for anesthetic to reduce pierced pain in hemodialysis patients.

Its application time to skin is required for 30 minutes before pierce in the leaflet. However, only 3.5 % patients obeyed its direction. There are extremely differences in application time of lidocaine tape in hemodialysis patients. (These investigations were approved by ethical committee.) Medical staffs asked us to investigate the proper use of lidocaine tape for hemodialysis patients. We predicted these differences were due to the lidocaine skin permeation during patients. According to clinical and basic investigations, we suggested lidocaine skin permeation was affected by water content in stratum corneum due to patient skin condition. Therefore, we try to enhance the lidocaine skin permeation by increasing water content in stratum corneum. We introduced one of suitable cases, medical and faculty staffs could figure out the suitable solution for proper use of lidocaine tape for hemodialysis patients. We also mentioned senses from clinical and practice points of view are important to solve several problems clinically.