“This article reviewed the literature regarding risk of systemic toxicity associated with use of EMLA in the pediatric and adult population.” Tran and Koo (2014).

Reference:

Tran, A.N. and Koo, J.Y. (2014) Risk of Systemic Toxicity With Topical Lidocaine/Prilocaine: A Review. Journal of Drugs in Dermatology. 13(9), p.1118-1122.

Abstract:

The eutectic mixture of lidocaine and prilocaine (EMLA, APP Pharmaceuticals, LLC.) is an anesthetic cream frequently used by dermatologists. Although side effects of EMLA are usually mild local skin reactions (ie, edema, pallor, erythema), more severe complications can be encountered including methemoglobinemia, central nervous system toxicity, and cardiotoxicity. This article reviewed the literature regarding risk of systemic toxicity associated with use of EMLA in the pediatric and adult population. All 12 clinical trials evaluating the safety of EMLA in either the pediatric or adult population generally followed dosing and administration guidelines set by the manufacturer and reported clinically insignificant plasma levels of methemoglobin, lidocaine, prilocaine, and their respective metabolites. To date, nine pediatric cases and three adult cases of systemic toxicity associated with EMLA have been published. Possible factors that contributed to the development of systemic toxicity include excessive amount of EMLA, large application area, prolonged application time, diseased and/or inflamed skin (eg, vascular malformations, molluscum contagiosum, eczema, previously abraded skin), age less than 3 months, prematurity, and concomitant use of a methemoglobin-inducing agent. Recommendations are provided on how to safely use EMLA to minimize the risk of systemic toxicity.

Thank you to our partners for supporting IVTEAM