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Review on Drug Abametapir for the Treatment of Head Lice

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Abstract: Pediculushumanuscapitis or head louse, a blood-sucking, wingless arthropod, has been a source of repulsion and embarrassment causing social distress, parental anxiety, and absenteeism. The battle to eradicate this infestation has not been rewarding as the obligate parasite continues to produce resistance to effective first-line pediculicides such as permethrin. Abametapir is a new pediculicide that inhibits the metalloproteinases critical to the hatching process of the eggs. Being ovicidaldrug, it needs a single application. In two large phase 3 studies with 704 subjects aged 26 months, abametapir lotion eliminated lice in 280% of subjects after a single 10-minskin burning. The Food and Drug Administration approved abametapir lotion, 0.74%, for a one-time topical treatment of head louse infestation for patients aged 6 months and older in July 2020. Good efficacy, safety, and a novel mechanism of action make it a welcome addition to the list of effective lousicidal drugs.

Keywords: pediculicide; Pediculushumanuscapilice Xeglyze; head lice infestation

REFERENCES

- [1]. Abametapir: Uses, Interactions, Mechanism of Action DrugBankhttps://go.drugbank.com/drugs/DB11932
- [2]. Abametapir Wikipedia https://en.m.wikipedia.org/wiki/Abametapir
- [3]. Abametapir the Treatment of Head Lice: Drug Review PubMed https://pubmed.ncbi.nlm.nih.gov/34157881.
- 0.74%of **AAFP** [4]. Abametapir (Xeglyze) for the Treatment Head Lice https://www.aafp.org/pubs/afp/issues/2022/0700/steps-abametapir-head-lice.html
- of the Efficacy and Safety of Abametapir Lotion Administered https://clinicaltrials.gov/ct2/show/NCT02060903
- [6]. Bowles VM, Yoon KS, Barker SC, Tran C, Rhodes C, Clark MJ: Ovicidal Efficacy of AbametapirAgainst Eggs of Human Head and Body Lice (Anoplura: Pediculidae). J Med Entomol. 2017 Jan;54(1):167-172. doi: 10.1093/jme/tjw132. Epub 2016 Aug 21.
- [7]. Bowles VM, Hanegraaf S, Ahveninen T, Sidgiddi S, Allenby K, Alsop H: Effect of a New Head Lice Treatment, Abametapir Lotion, 0.74%, on Louse Eggs: A Randomized, Double-Blind Study. Glob Pediatr Health. 2019 Feb 22;6:2333794X19831295. doi: 10.1177/2333794X19831295. eCollection 2019.
- [8]. Gunning K, Kiraly B, Pippitt K: Lice and Scabies: Treatment Update. Am Fam Physician. 2019 May 15:99(10):635-642.
- [9]. FDA Approved Drug Products: Xeglyze (Abametapir) topical lotion.
- [10]. BusinessWire: Dr. Reddy's Laboratories received approval of XEGLYZETM (abametapir) lotion, 0.74%, in the U.S.
- [11]. https://pubmed.ncbi.nlm.nih.gov/34157881/
- [12]. Ronald Harding, Lewis David Schulz, Vernon Morrison Bowles, "Pediculicidal composition." WIPO Patent WO2015107384A2, published July, 2015
- [13]. Boutellis A, Abi-Rached L, Raoult D. The origin and distribution of human lice in the world. Infection, genetics and evolution. Infect Genet Evol. 2014;23:209-217.
- [14]. Sangaré AK, Doumbo OK, Raoult D. Management and treatment of human lice. Biomed Res Int. 2016;2016:8962685.

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- [15]. Koch E, Clark JM, Cohen B, et al. Management of head louse infestations in the United States: a literature review. PediatrDermatol. 2016;33:466-472.
- [16]. Casida JE. Pest toxicology: the primary mechanisms of pesticide action. Chem Res Toxicol. 2009;22:609-619.
- [17]. Gordon SC. Shared vulnerability: a theory of caring for children with persistent head lice. J SchNurs. 2007;23:283-292.
- [18]. Yoon KS, Previte DJ, Hodgdon HE, et al. Knockdown resistance allele frequencies in North American head louse (Anoplura: Pediculidae) populations. J Med Entomol. 2014;51:450-457.

DOI: 10.48175/568

- [19]. Devore CD, Schutze GE. Head lice. Pediatrics. 2015;135:e1355-e1365.
- [20]. https://journals.sagepub.com/doi/10.1177/10600280211027968

