

サリチル酸ナトリウム, エチレンジアミン
四酢酸二ナトリウム, 及びポリオキシエチ
レン(23) ラウリルエーテルのセフォキシチ
ンナトリウム直腸吸収促進効果の比較

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**Comparison of the effects of sodium salicylate, disodium
ethylenediaminetetraacetic acid and polyoxyethylene-23-
lauryl ether as adjuvants for the rectal absorption of
sodium cefoxitin**

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ABSTRACT Sodium salicylate, disodium ethylenediaminetetraacetic acid (EDTA) and polyoxyethylene-23-lauryl ether (POE) significantly enhanced the absorption of cefoxitin from the rectum but with the following differences. (1) The effectiveness of salicylate or EDTA was enhanced by sodium chloride, whereas the activity of POE was not. (2) Although the ratios of plasma cefoxitin peak values to cefoxitin dose were constant with POE or EDTA, the peak to dose ratios with salicylate decreased with increasing cefoxitin concentration. (3) Phlorizin and 4,4'-diisothiocyanostilbene-2,2'-disulfonic acid (DIDS) inhibited the effectiveness of salicylate, but did not influence the adjuvant action of either POE or EDTA. (4) Although treatment with salicylate resulted in slightly less protein release than treatment with NaCl, both POE and EDTA increased the release of protein from the rectal mucosa. It appears that the effects of salicylate occur at the protein fraction of the rectal mucosa through a saturable process whereas the adjuvant action of POE and EDTA appears to involve some irreversible disruption of the membrane.

抄録 サリチル酸ナトリウム, エチレンジアミン四酢酸二ナトリウム (EDTA), 及びポリオ

キシエチレン(23)ラウリルエーテル (POE) はいずれも難吸収性薬物のセフォキシチンナトリウムの直腸吸収を顕著に促進した。これら化合物の促進効果を比較する目的で、NaCl、投与量、各種阻害剤の影響について検討した。更に、膜タンパク質に与える促進剤の影響についても検討を加えた結果、サリチル酸ナトリウムは、EDTA、POE とは異なった吸収促進機構をもつことが推察された。

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