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学位論文の題名	Dermopathy associated with cetuximab and panitumumab: an investigation of the usefulness of moisturizers in its management セツキシマブおよびパニツムマブによる皮膚障害に関する基礎情報の取得と保湿薬の有用性の検討 Clin Cosmet Investig Dermatol. Vol. 10 : P. 353-361, 2017
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Abstract

Aims: Limited data exist regarding the objective evaluation of skin exsiccation caused by epidermal growth factor receptor (EGFR) inhibitors¹. Objective indices were applied to evaluate the usefulness of a moisturizer against skin exsiccation associated with the use of EGFR inhibitors for cancer patients.

Patients and methods: Patients with either colorectal or head and neck cancer treated with either cetuximab or panitumumab were randomly assigned 1:2 to the prophylactic-treatment arm, where participants received prophylactical moisturizer treatment (heparinoid preparation, Hirudoid[®], Maruho, Osaka, Japan), or to the symptomatic-treatment arm, where moisturizer was applied after the onset of cutaneous symptoms. Patients were observed for 6 weeks after the start of EGFR inhibitor administration.

Results: A total of 15 patients were included and assessed: 6 in the prophylactic-treatment group and 9 in the symptomatic-treatment group. We evaluated the effect of EGFR inhibitors on the skin's physiologic function. Administration of EGFR inhibitors resulted in a continued reduction in the moisture content of the horny layer and a decrease in cutaneous sebum levels. Skin observation revealed frequent development of an acneiform rash, and significantly higher exsiccation and exfoliation scores. EGFR inhibitor

administration was associated with a decrease in the horny layer moisture content and lower cutaneous sebum levels in the symptomatic-treatment group. In contrast, levels of both indicators were increased in the prophylactic-treatment group. Moreover, the EGFR-Inhibitor-associated increase in exciccation and exfoliation scores were minimized in the prophylactic-treatment group relative to the symptomatic-treatment group.

Conclusion: Application of a moisturizer is effective against dry skin induced by administration of an EGFR inhibitor.

Keywords: EGFR inhibitor, moisturizer, cetuximab, panitumumab, skin exciccation

References

1. Nakahara T, Moroi Y, Takayama K, et al. Change in sebum levels and the development of acneiform rash in patients with non-small cell lung cancer after treatment with EGFR inhibitors. *Onco Targets Ther.* 2015;28(8):259–63.