

5-FU induced palmar-plantar erythrodyesthesia – a hospital pharmacy developed “antidot”

SIR - In December 2003 the JOPP published two articles: 1) PPE caused by different agents (Gilbar) 2) prophylaxis and treatment of PPE caused by the oral 5-FU derivate capecitabine (Motimer et. al.) with pyridoxine. Both articles revealed that there is no real good treatment option in most cases. Here I would like to add some useful information concerning the interventional treatment of PPEs caused by 5-FU infusions or it's oral derivatives (Capecitabine, Uracil/Tegafur). In our hospital pharmacy we developed a formulary for the treatment of the 5-FU induced hand-foot-syndrome and the accompanying mucositis (see below). Up to now it is not commercially available so it has to be compounded in the pharmacy.

The effectiveness is not yet demonstrated in a large clinical study. But, asking an experienced physician, he would answer “it works” and patients treated successfully with the ointment are asking their physician for more medication because of its palliative properties. The same patients experience relief from the first day of treatment *if* they respond (uracil is of course not a “wonder drug”, not every patient responds). Let me add, uracil only works in case of side effects (interventional) and not in prophylaxis!

To our experience the ointment is also very useful in treating extravasations with 5-FU, which often cause troublesome problems like reversible but very painful blisters. Even skin contact with 5-FU can cause irritation and/or blisters as seen in an accidental face contamination in the year 2000 [1]. We saw an excellent antidotal effect in the treatment of this accident.

I would like to encourage all colleagues to test these formulation to obtain clinical results in the sense of adding more evidence to the usefulness of this antidote. The composition of the ointments are as follows:

Uridine 10% hand- and foot ointment

Uridin	10 g
Propylene glycol	q.s.
Basiscreme DAC ad	100 g

Uridine is mixed with a small amount of propylene glycol. This dispersion is then added to *DAC basic cream*. DAC basic cream is monographed in the *Deutscher Arzneimittel Codex* (German drug codex), representing a collection of drug monographs besides the European and German Pharmacopoeia. DAC basic cream is an amphiphile nonionic cream.

Uridine 10% adhesive-paste

Uridin	1 g
Subliquid paraffin	6,65 g
Carbopol 934	2,35 g
spearmint oil	1 gtt.

Uridine is added to a hydrophobic adhesive-paste composed of subliquid paraffin and Carbopole 974P, a type of polyacrylic acid. The paste is flavoured with spearmint oil.

REFERENCES

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1. Barth, J. Uridin-Hand-Fuß-Salbe und Uridin-Haftpaste. Krankenhauspharmazie 2000; 21: 625-628.