

## **SPECIAL COMMUNICATIONS**

### ***Letters to the Editor-in-Chief***

## **Acyclovir Dosage in Prevention of Outbreaks of Herpes Gladiatorum**

To the Editor-in-Chief

Dr Gáspár's recommendations addressed the usage of oral acyclovir as a means to treat acute and recurrent outbreaks of Herpes Gladiatorum<sup>1</sup>. Dosages of acyclovir 200 mg 5 times daily for 7-10 days was listed as a means to treat acute outbreaks and 400 to 800 mg daily for recurrent outbreaks. Whereas the usage of acyclovir is acceptable, following the dosing parameters is crucial. PK/PD values of acyclovir metabolism indicate that the drug will peak and clear quickly after ingestion. Which is why dosing every 5 hours is crucial to maintain consistent serum levels. Increasing the dosage will only mean a higher peak but will not maintain consistent serum levels. Lack of appropriate serum levels will allow the virus to potentially persist for a longer period of time. Adding to that the poor compliance which occurs when dosing is > 2-3 times a day<sup>2</sup> and you can see that it's difficult to treat and control.

Valacyclovir (which breaks down into acyclovir) has different PK/PD values and allows once to twice a day dosing and still maintain consistent serum concentrations of acyclovir. This is a key point since usage of these drugs are different in this sport than for the general population. Pharma sells the drug with dosing parameters that alleviate the patient's symptoms. Our dosing parameters treat to clear an outbreak and prevent/reduce transmission. These are completely different parameters. In wrestling, we treat and prophylaxis to prevent transmission to other athletes. Whereas ideal usage of acyclovir would be effective, real life situations indicate valacyclovir usage would be a better choice strictly due to convenient dosing parameters.

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### **REFERENCES**

1. Gáspár K. Skin Conditions in Wrestling-How to Prevent. International Journal of Wrestling Science 2019; Vol 9 Issue 2. 106-10.
2. Claxton, A.J., J. Cramer, and C. Pierce. A systemic review of the associations between dose regimens and medication compliance. Clin. Therap. 23(8):1296-1310, 2001.