



# “Dermatology - More than Skin Deep!”



## A Case Report of Disseminated Herpes Zoster Infection in a Patient with Alcoholic Liver Disease

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### Introduction

What appears on the skin can be a manifestation of systemic disease; an infectious, auto-immune or malignant process. Not all new inpatient rashes are drug-related.

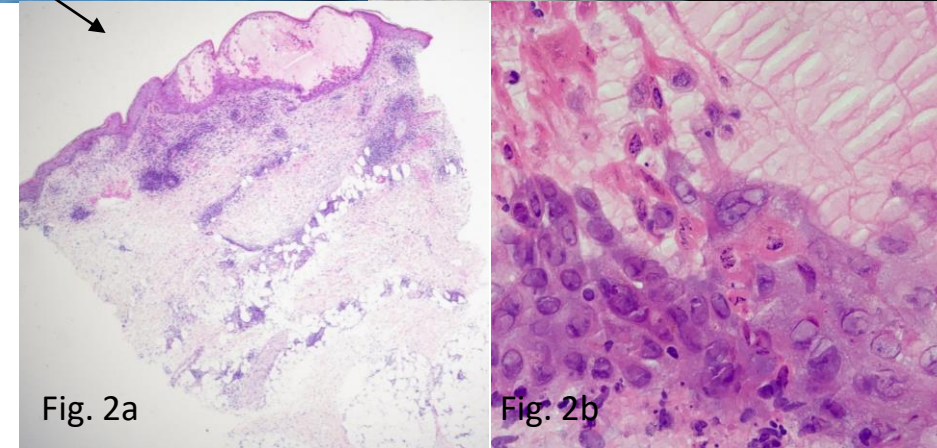
### Presentation

A 53 year old female inpatient, being treated for decompensated alcoholic liver disease, developed a widespread, polymorphic rash, with crops of sterile vesicles (Fig. 1a&b). She was also being investigated for a fluctuating cognitive state. Electroencephalography (EEG) showed encephalopathy. Rifaximin had been newly commenced to treat hepatic encephalopathy. Drug eruption was a differential diagnosis for this rash, however as it was atypical and eosinophils were normal, a skin biopsy was performed.



### Histological Assessment

Figure 2a shows the vesicle cavity at the top, then the perivascular infiltrate beneath in the superficial dermis. Figure 2b shows the floor of the vesicle. The histopathology report commented that the cells have a glassy nuclear chromatin and are in some cases multinucleate, which are features of herpesvirus infection. Subsequent viral PCR confirmed active varicella zoster infection. Appropriate treatment with Aciclovir, along with potent topical steroids, emollients and anti-histamines were commenced. A repeat EEG showed improvement in the degree of encephalopathy, and the rash eventually resolved.



### Discussion

Confirmation of an alternative diagnosis to a drug reaction, enabled the patient to continue on necessary medication.

Dual pathology may be present. Serial ammonia levels were normal, although elevation is not required for a diagnosis of hepatic encephalopathy<sup>1</sup>. It is possible that Herpes encephalitis may have contributed to this patient’s confusion. It is important to allow an initial presumptive diagnosis to be challenged, with emerging clinical details.

Recognition that a patient is immunosuppressed (prolonged ICU admission, background of chronic alcoholism and poor nutrition) raises the suspicion of an atypical or more severe presentation of an infective process, in this case with VZV.

### References

1. Ninan J. Feldman L. Ammonia Levels and Hepatic Encephalopathy in Patients with Known Chronic Liver Disease. J. Hosp. Med. 2017 August;12(8):659-661