

ENTERIC GLIAL CELLS IN COORDINATED REGULATION OF DUAL INTESTINAL BARRIER FUNCTION DURING ULCERATIVE COLITIS DEVELOPMENT

Lan Liu

UEG Week Copenhagen 2023

Poster

IBD

October 15, 2023

A study in DSS-induced colitis mice and UC patient biopsies identifies enteric glial cells, specifically GFAP+/S100+ subtype, as regulators of both intestinal epithelial and gut vascular barriers, with dihydroartemisinin treatment reducing their activation and improving barrier function.

KEY POINTS

- Chronic colitis mice demonstrated impaired intestinal epithelial barrier and gut vascular barrier, with increased permeability, reduced tight junction protein expression, and elevated circulating endotoxin levels
- GFAP+/S100+ enteric glial cells activated and proliferated in response to dual intestinal barrier compromise, with their content corresponding to barrier damage severity
- Dihydroartemisinin treatment markedly reduced GFAP+/S100+ enteric glial cell proliferation and activation, ameliorated both epithelial and vascular endothelial barrier function, and significantly reduced intestinal permeability
- Dihydroartemisinin restricted monocyte recruitment to enteric glial cells by inhibiting CCL2 production, thereby alleviating intestinal inflammation
- The authors conclude that these findings may contribute to identifying novel UC treatment targets and neurological markers

VIEW THIS CONTENT ON GUTFLIX

<https://gutflix.eu/search/d/5dca9e16-743c-11ee-9b8b-0242ac140004>



AI-generated summary

This summary was generated by an AI large language model based on the content transcript. It is for informational purposes only and should not be considered a substitute for clinical judgment. Always rely on your professional expertise and the full clinical context when making clinical decisions.