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Expression and Immunological Activity of Neuropeptide Urocortin (UNC) in Human Gastric Mucosa

E. Chatzaki[1*], I. Charalampopoulos[1], C. Leontidis[3], M. Tsardi[4], I. Mouzas[3], C. Tsatsanis[2], A.N. Margioris[2] and A. Gravanis[1]

Laboratories of Pharmacology[1], and Clinical Chemistry[2], Gastrenterology Clinic[3] and Pathology Laboratory[4], Medical School, University of Crete, Heraklion 71110, Greece

INTRODUCTION AND AIM

The neuropeptides CRH and Urocortin (UCN) are expressed in the enteric epithelium where it their involvement in the mechanisms controlling local inflammation is suggested. Aim of the present study was to examine their expression in the human gastric mucosa and especially in patients with inflammation related to *Helicobacter pilori* (HP) infection, before and after treatment.

RESULTS

Our results were as follows: 1) Using RT-PCR in total RNA from gastric mucosal biopsies, we identified the presence of UCN but not CRH RNA transcripts. 2) UCN was also localized immunohistochemically to the epithelial cells of the flaveolars and the mucus secreate glands, as well as to inflammatory elements of the stroma. 3) the concentration of UCN was measure using RIA in 4 groups of biopsies according to the pathological examination: a) normal subjects, b) patients with inflammation and HP infection, c) treated and d) non-treated subjects two months after therapy. UCN was found elevated ($p<0.05$) in the group of patients compared to normal subjects, whereas it was further increased in the group of treated patients.

CONCLUSIONS

These results reveal UCN expression in human gastric epithelium and imply a role in the local anti-inflammatory process.