

Pentadecapeptide BPC 157 therapy in rats with cysteamine induced-terminal ileitis

Mariam Samara^a, Ivan Krezić^a, Marko Antunović^a, Marko Belamarić^a, Will Migo^a, Slaven Gojković^a, Vilim Dretar^a

^a*Department of Pharmacology, School of medicine University of Zagreb*

Mariam Samara 0000-0003-2384-273X, Ivan Krezić 0000-0001-7994-5645, Marko Antunović 0000-0002-3801-5481, Marko Belamarić 0000 - 0002 – 0552 – 8264, Will Migo 0000-0002-0775-7407, Slaven Gojković 0000-0003-4020-326, Vilim Dretar 0000 – 0002 – 3969 – 712X

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We introduce pentadecapeptide BPC 157 therapy in rats with cysteamine induced-terminal ileitis 1h/1month/2months. We counteracted gross hyperemia, edema, erosion, bleeding, microscopically significant loss of villous architecture, loss and shortening of villae and severe lymphocytic infiltrate. Pentadecapeptide counteracts various lesions in the whole GI-tract and free radical formation, and tested in ulcerative colitis trials and now in multiple sclerosis. Cysteamine was known to induce gastric-acid hypersecretion as a prototype of duodenal lesion. Cysteamine induced duodenal lesions after gastrectomy, and applied as an enema, ulcerative colitis in rats Cysteamine was applied in female Albino Wistar rats into the terminal ileum, 5 cm segment up to ileocecal valve, which was kept gently compressed for 1 min, and then released. Medication(BPC, or saline (controls)) was applied as an abdominal bath immediately after the end of the cysteamine application procedure, and then if rats were not sacrificed at 1 h, continuously, perorally in drinking water till the end of 1 or 2 months The hyperemia, edema, erosion and bleeding scores were summarized. Microscopically, cysteamine induced terminal ileitis presents with: submucosal congestion, significant loss of villous architecture, loss and shortening of villae and lamina propria infiltrated with mild to severe lymphocytic infiltrate, much like intraepithelial lymphocyte infiltration and some epithelial elevation from lamina propria. Better preservation of mucosal architecture appears in pentadecapeptide treated rats. There is only mild villous edema with capillary congestion and mild lymphocytic infiltrate. No epithelial elevation from lamina propria For further therapy, beneficial effect of the BPC counteracts cysteamine- terminal ileitis.