ABSTRACT

Brain-gut syndromes or functional gastrointestinal syndromes represent a group of disorders with a common pathogenetic basis, the dysfunction of brain-gut axis. The main brain-gut syndrome is the irritable bowel syndrome and other included disorders are the inflammatory bowel diseases, peptic ulcer, functional dyspepsia, gastro-esophageal reflux, chronic abdominal pain in childhood, and chronic chest pain in adults, related to visceral pain. Brain and gut communicate via the autonomous neural system and gastrointestinal hormones, secreted by the neuroendocrine cells of the diffuse neuro- endocrine system of the gastrointestinal tract. The detection of the neuropeptides of CRF family (Corticotropin Releasing Factor) and selective receptors in the gastrointestinal tract has made clearer the role of HPA (Hypothalamus-Pituitary-Adrenals) axis in brain-gut syndromes. The cross-talk of HPA axis and brain-gut axis and the neuroendocrine mapping of the gastrointestinal tract enhances the perspectives for novel molecular therapeutic interventions targeting the brain-gut axis.

Key-words: *Functional gastrointestinal disorders, brain, gut, Corticotropin Releasing Factor, urocortins, neuroendocrinology, Phychosomatic medicine.*