Hypothesis / aims of study

The cause of Painful Bladder Syndrome / Interstitial Cystitis is currently unknown. However, several explanations have been proposed and include: autoimmune, nerve fiber, mast cell, leaky GAG layer and infection hypotheses as well as a possible production of a toxic substance in the urine. Within this retrospective case collection the role of histamine overproduction is highlighted.

Study design, materials and methods

A total of 33 women with diagnosed Interstitial Cystitis were surveyed. Histamine in faecal samples was measured with a commercially available ELISA kit (LDL, Germany). Additionally, vaginal swabs were analysed for histamine producing bacteria of the Enterococcus family.

Results

In 25 of the 33 analysed women elevated histamine levels were found in faecal samples. In 16 out of the 25 women the presence of Enterococcus spp. in vaginal swabs was also detected. In further 4 women only the presence of Enterococcus spp. was found. Only 4 women did neither show elevated histamine levels nor the presence of Enterococcus spp. in vaginal swabs.

Interpretation of results

Elevated histamine levels and the presence of histamine producing bacteria could be found in the majority of women with diagnosed Interstitial Cystitis. Histamine intolerance is a poorly described disease which may be responsible for a variety of symptoms (e.g. digestive complaints and non-allergic food hypersensitivity). Histamine overproduction may mimic a mast cell burst thus explaining the symptoms of Interstitial Cystitis.

Concluding message

Within this retrospective case collection the role of histamine in the aetiology of PBS/IC was highlighted.

Disclosures

Funding: MVZ Institut für Mikroökologie GmbH, 35745 Herborn, Germany Clinical Trial: No Subjects: HUMAN Ethics not Req’d: it is a retrospective case collection Helsinki not Req’d: it is not a prospective study Informed Consent: No