

HISTAMINE INTOLERANCE

Histamine intolerance is a condition associated with an impaired ability to metabolise ingested histamine. This is caused by reduced DAO activity, leading to an accumulation of histamine in the plasma and the occurrence of adverse effects. Histamine is synthesised endogenously by the body from histidine and can also be obtained exogenously from food.

MAIN SYMPTOMS

- flatulence
- postprandial bloating
- diarrhoea, abdominal pain
- constipation
- dizziness, headache
- cardiac arrhythmia, hypotension, tachycardia
- dysmenorrhoea
- asthma, runny nose
- rash, urticaria, itching

CAUSES AND PATHOGENESIS

- imbalance between histamine uptake/production and degradation
- genetic polymorphisms
 - DAO and HNMT
- reduced DAO activity/enzyme level
 - cofactor deficiency
 - inflammatory bowel diseases / dysbiosis
 - carbohydrate malabsorption
 - non-celiac gluten sensitivity
 - DAO inhibiting drugs

THERAPY

- **bowel therapy**
 - histamine-reducing and -blocking probiotics
 - prebiotics (acacia fibre, 2'-FL, scFOS/scGOS)
 - anti-inflammatory agents (phosphatidylcholine, glutamine)
 - mucosal and milieu stabilising measures (humic acids, zeolite)
 - DAO enzyme substitution if necessary
- **compensates for nutritional deficiencies**
 - vitamin B6
 - zinc, copper
- **vitamin c helps eliminate histamine**
- **S-adenosyl methionine as an important cofactor and methyl group donor**
- **diet low in histamine**
 - eat food fresh and unprocessed
 - avoid reheating
 - avoid fermented foods (e.g. hard cheeses, cured meats)
 - avoid alcoholic drinks (especially red wine and beer)
 - avoid additives
 - distribute critical foods throughout the day
 - reduce biogenic amines
- **avoid precipitating drugs (if possible)**
- **with carbohydrate malabsorption, avoid relevant foods**
- **reduce/avoid alcohol, nicotine**
- **reduce stress**



HAVE THE
FOLLOWING
EXAMINED

DIAGNOSTICS



SA760A HIT BASIC PROFILE

Material: T909, EDTA, Hep, S

DAO/ -cofactors

- diaminoxidase
- vitamin B6 (P5P)
- zinc, copper

Histamine in stool



SA760B HIT MIDI PROFILE

Material: T909, EDTA, Hep, S

In addition to the Basic Profile:

Histamine Degradation Capacity



SA760C HIT COMPLETE PROFILE

Material: T909, T928, EDTA, Hep, S

In addition to the Midi Profile:

HNMT cofactor

- SAM



DIFFERENTIAL DIAGNOSTICS

- **Exclusion of genetic causes**
 - H420 histamine intolerance:
5 gene variations in HNTM and DAO
- **Exclusion of allergies, systemic mastocytosis**
 - C044 PreScreen B
 - 19252 tryptase