Clinical Notes .

Mycotoxins, Extensive

Specimen type - Urine, Spot

Collected
05-Sep-26

AFLATOXINS GROUP

TEST	RESULT	H/L	REFERENCE	UNITS
Aflatoxin B1	1.33		(<3.50)	ng/gCR
Aflatoxin B2	0.65		(<5.30)	ng/gCR
Aflatoxin G1	<DL		(<2.20)	ng/gCR
Aflatoxin G2	<DL		(<6.50)	ng/gCR
Aflatoxin M1	<DL		(<4.70)	ng/gCR
Sterigmatocystin	<DL		(<0.40)	ng/gCR

GLIOTOXINS GROUP

TEST	RESULT	H/L	REFERENCE	UNITS
Gliotoxin derivative	127.00		(<180.00)	ng/gCR

OCHRATOXIN GROUP

TEST	RESULT	H/L	REFERENCE	UNITS
Ochratoxin A	0.89		(<2.20)	ng/gCR

TRICHOTHECENES - Type A

TEST	RESULT	H/L	REFERENCE	UNITS
Diacetoxyscirpenol	<DL		(<2.800)	ng/gCR
HT-2 Toxin	<DL		(<5.20)	ng/gCR
T-2 Toxin	<DL		(<0.500)	ng/gCR

TRICHOTHECENES - Type B

TEST	RESULT	H/L	REFERENCE	UNITS
Deoxynivalenol	<DL		(<15.00)	ng/gCR
Nivalenol	0.66		(<3.70)	ng/gCR

TRICHOTHECENES GROUP - Type D macrocyclic

TEST	RESULT	H/L	REFERENCE	UNITS
Roridin A	1.12		(<5.50)	ng/gCR
Roridin E	0.34		(<3.20)	ng/gCR
Roridin H	<DL		(<3.90)	ng/gCR
Roridin L-2	<DL		(<5.70)	ng/gCR

TEST	RESULT	H/L	REFERENCE	UNITS
Satratoxin G	0.46	H	(<0.30)	ng/gCR
Satratoxin H	<DL		(<0.40)	ng/gCR
Verrucarin A	0.93		(<1.60)	ng/gCR
Verrucarin J	<DL		(<2.50)	ng/gCR

ZEARALENONE GROUP

TEST	RESULT	H/L	REFERENCE	UNITS
Zearalenone	0.84		(<1.00)	ng/gCR

MYCOTOXINS GROUP - Other

TEST	RESULT	H/L	REFERENCE	UNITS
Alternariol	0.42		(<1.50)	ng/gCR
Chaetoglobosin A	<DL		(<9.80)	ng/gCR
Citrinin	<DL		(<5.20)	ng/gCR
Enniatin B1	0.16		(<0.50)	ng/gCR
Fumonisins B1	3.15	H	(<2.20)	ng/gCR
Fumonisins B2	2.21		(<2.50)	ng/gCR
Fumonisins B3	0.60		(<4.20)	ng/gCR
Mycophenolic Acid	<DL		(<2.50)	ng/gCR
Patulin	<DL		(<7.50)	ng/gCR

TEST	RESULT	H/L	REFERENCE	UNITS
Creatinine, Urine	6.60		(2.47-19.20)	mmol/L

Mycotoxins Comment

TRICHOTHECENES GROUP ELEVATED (URINE):

Elevated urinary trichothecenes indicate exposure to highly cytotoxic mycotoxins produced by Fusarium, Stachybotrys, and related species. These compounds are potent inhibitors of protein synthesis and are commonly associated with water-damaged buildings and contaminated grains.

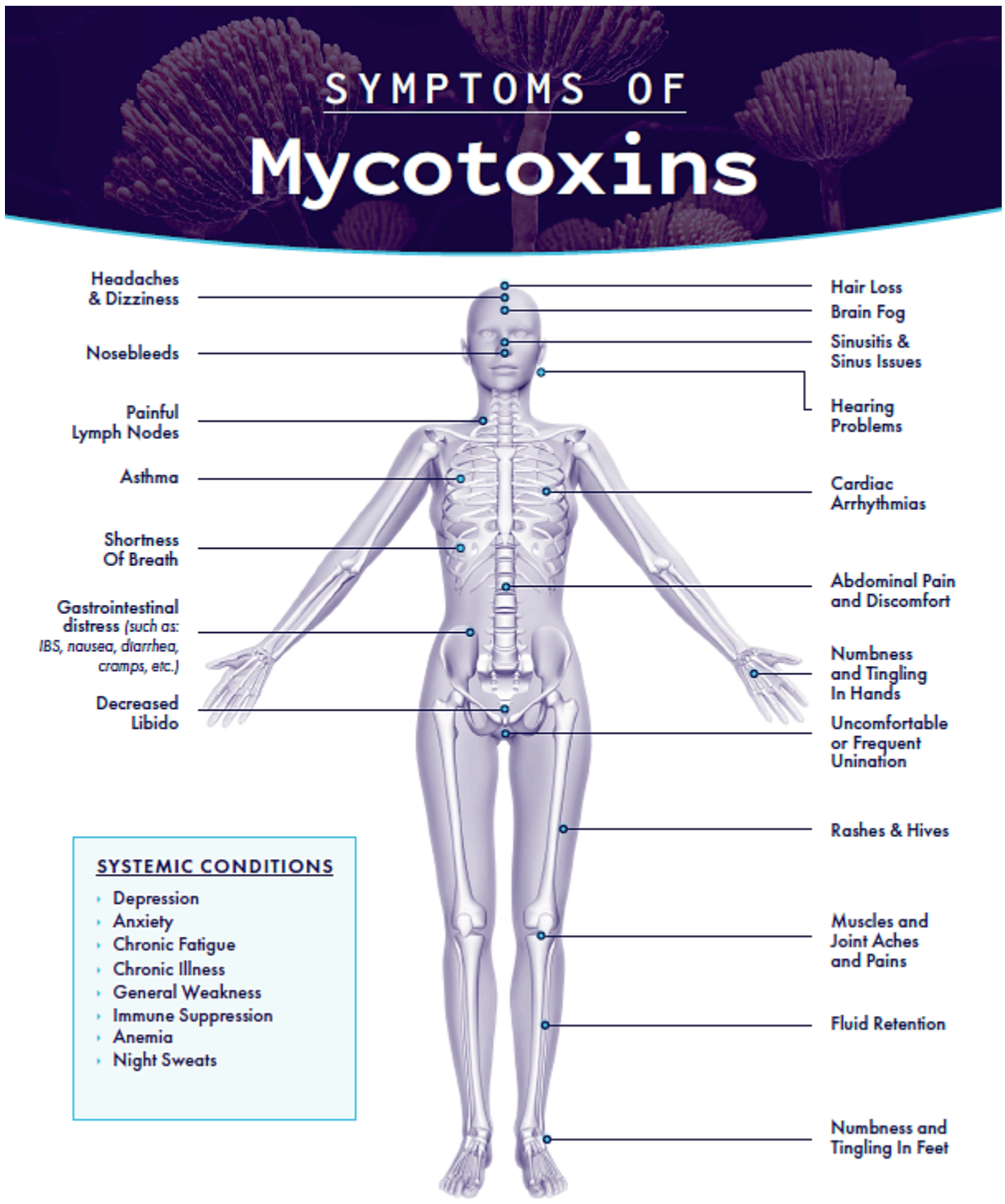
Clinically, trichothecene exposure is associated with prominent inflammatory and neurological symptoms, including headaches, fatigue, cognitive dysfunction, mucosal irritation, gastrointestinal disturbance, and immune dysregulation. Trichothecenes are considered among the more clinically aggressive mycotoxins.

From a functional medicine perspective, management requires urgent identification and removal of environmental exposure, particularly from indoor mould sources. Supportive strategies may include inflammatory modulation, antioxidant support, gut barrier protection, and carefully titrated binders under clinical supervision. Due to their potency, treatment should be individualised and paced to avoid symptom exacerbation.

FUMONISIN B1 (FB1) ELEVATED:

Description: A neurotoxic and hepatotoxic mycotoxin from Fusarium species, typically contaminating corn. It disrupts sphingolipid metabolism and cellular membranes.

Symptoms: Neurocognitive symptoms, hepatic enzyme elevations, GI disturbances.


SYMPTOMS OF
Mycotoxins
Headaches & Dizziness
Nosebleeds
Painful Lymph Nodes
Asthma
Shortness Of Breath
Gastrointestinal distress (such as: IBS, nausea, diarrhea, cramps, etc.)
Decreased Libido
Hair Loss
Brain Fog
Sinusitis & Sinus Issues
Hearing Problems
Cardiac Arrhythmias
Abdominal Pain and Discomfort
Numbness and Tingling In Hands
Uncomfortable or Frequent Unination
Rashes & Hives
Muscles and Joint Aches and Pains
Fluid Retention
Numbness and Tingling In Feet
SYSTEMIC CONDITIONS
Depression
Anxiety
Chronic Fatigue
Chronic Illness
General Weakness
Immune Suppression
Anemia
Night Sweats

MYCOTOXIN	Cellular Activity of Mycotoxins	Symptoms/Other	Association with a "Disease State"
AFLATOXINS			
Aflatoxin B1	Binds DNA and RNA replication	Shortness of breath, Weight loss, most potent and highly carcinogenic	Primarily attacks the liver, other organs include kidneys and lungs
Aflatoxin B2	Inhibits DNA and RNA replication	Impaired fetal growth	Affects the liver and kidneys
Aflatoxin G1	Cytotoxic, induces apoptosis in cells, DNA damage	A. flavus is a leading cause of invasive aspergillus in immune compromised patients	Cancer, neonatal jaundice
Aflatoxin G2	Cancer, neonatal jaundice	Aflatoxicosis in humans and animals	Malnutrition, Lung cancer
OCHRATOXIN A			
Ochratoxin A	Inhibits mitochondrial ATP, potent teratogen, immune suppressor	Fatigue, Dermatitis, Irritated bowel	Kidney disease, Cancer
MACROCYCLIC	**TRICHOTHECENES**		
Satratoxin G	DNA, RNA and Protein synthesis inhibition	Fatigue	Bleeding disorders, Nervous system disorders
Satratoxin H	Inhibits protein synthesis	Fatigue	Breathing issues
Isosatratoxin F	Immunosuppression	Weakened Immune System	
Roridin A	Immunosuppression	Weakened Immune System	-
Roridin E	DNA, RNA and Protein synthesis disruption	Weakened Immune System	Lung and Nasal olfactory problems
Roridin H	Inhibits protein synthesis	Weakened Immune System	-
Roridin L-2	Immunosuppression	Weakened Immune System	-
Verrucarin A	Immunosuppression	-	-
Verrucarin J	Immunosuppression	-	-
GLIOTOXIN	**DERIVATIVE**		
Gliotoxin	Attacks intracellular function in immune system	Memory and Breathing issues	Immune Dysfunction disorders
ZEARALENONE			
Zearalenone	Estrogen mimicry	Early puberty, low sperm counts, cancer	Cancer

Methodology

Liquid Chromatography-Mass Spectrometry (LC-MS/MS/MS), Automated Chemistry/Immunochemistry