

to assess the role and the actors of chronic activation of inflammatory signaling complexes to establish a potential association between dysregulation of inflammasome activation, chronic inflammatory disease and enhancement of behavioral abnormalities.

**Results:** Our bibliographic review revealed that dysregulation of the inflammasome is associated with the onset and progression of several autoinflammatory and autoimmune diseases, including cryopyrin-associated periodic fever syndrome, familial Mediterranean fever, rheumatoid arthritis, and systemic lupus erythematosus. These multimeric complexes form in response to molecular patterns unique to pathogens and cellular damage, triggering a cascade of downstream responses, including the induction of pyroptotic cell death and release of proinflammatory cytokines. Some inflammasomes directly recognize these patterns, while others indirectly sense these patterns through changes in the homeostatic environment of the cell. Moreover, although being a normal part of the skin flora, yeasts of the genus *Malassezia* are associated with several inflammatory skin diseases including pityriasis versicolor (tinea versicolor), atopic eczema, psoriasis, *Malassezia* folliculitis and onychomycoses. In the context of tolerating fungi during colonization and eliciting, activation, of inflammasomes signaling complexes, has been identified as an integral part of antifungal host defense. While the activation of inflammasomes mainly the NLRP3 one, was shown to be pivotal for innate immunity against pathogenic fungi such as *Candida albicans*, their role in the fungal genus *Malassezia* remains imprecise. Even though, many observations suggest that simultaneous activation of NLRP3, NLRC4 and AIM2 inflammasomes may play an important role.

**Conclusions:** Whereas, chronic inflammasome activation such as by chronic infectious has been tied to the development of metabolic syndromes, neurodegenerative diseases, and cancer progression, a possible interplay between chronic invasion by the genus *Malassezia*, vigorous immune response to eliminate invading fungal pathogens, disruption of immune sensors of genotoxic stress, development of chronic inflammatory disease and behavioral abnormalities may be a new field of scientific researches.

**Disclosure of Interest:** None Declared

## EPP0420

### Potential associations of food allergy and altered neurodevelopment in children

B. Abdelmoula<sup>1\*</sup>, N. Kharrat<sup>2</sup>, R. Abdelhedi<sup>3</sup> and N. Bouayed Abdelmoula<sup>1</sup>

<sup>1</sup>Genomics of Signalopathies at the service of Medicine, Medical University of Sfax; <sup>2</sup>Research group on molecular and screening process and <sup>3</sup>Research group on molecular and screening process and, Centre of Biotechnology of Sfax, Sfax, Tunisia

\*Corresponding author.

doi: 10.1192/j.eurpsy.2023.732

**Introduction:** Allergic immune reactions and adverse reactions to foods, have been described as having growth concerns in children with food allergy. Moreover, immune dysregulation and inflammation have been documented as typical hallmarks in both allergic and neurodevelopmental conditions.

**Objectives:** In this review, we address the association of food allergy and altered neurodevelopment in children.

**Methods:** We comprehensively review the scientific literature using Pubmed database and other search platforms to state the potential associations of food allergy and altered neurodevelopment in children.

**Results:** Food allergy is a pathological, potentially deadly, immune reaction activated by normally inoffensive food protein antigens. It is an important public health problem that affects children (children under the age of 5 years: 5 %) and adults, and it has been increasing in prevalence in the last 2 to 3 decades. The enhancement of the knowledge of the pathophysiological mechanisms lead to many suggestions such as the important role of the intestinal microbiota, the role of the immunological adaptation of the mucosal immune system to food antigens and the nutritional impact and growth concerns of children with food allergy. In recent studies and reviews, a significant and a positive association of common allergic conditions, in particular food allergy, with autism spectrum disorder and with attention deficit hyperactivity disorders have been reported. At the mechanistic level, it was recently shown through animal models, the potential role of intracranial Mast cells in neuroinflammation and neuropathology associated with food allergy as well as the potential role of the dysfunction of the gut-brain axis in promoting white matter development during early life when the brain is vulnerable to environment (such as food restrictions) that can result in a wide spectrum of neurodevelopmental disorders later in life. Food allergy was also associated in literature with enhanced mTOR signaling in the brain and gut, which may impact brain and behavioral development.

**Conclusions:** Neurodevelopmental disorders which occur in childhood in the context of food allergy is a challenging public health problem that need more human research studies to understand underlying mechanisms and promote therapeutic innovations.

**Disclosure of Interest:** None Declared

## EPP0421

### Cannabis use in different mental disorders: a descriptive study in a psychiatric hospital

B. Samsó\*, A. López Fariña, C. González Navarro, L. Morado San Segundo, A. Bilbao Idarraga, U. López Puentes, R. F. Lopez Brokate, T. Ruiz de Azua Aspizua, U. Ortega Pozas, C. Arán Cisneros, E. Garnica de Cos and I. Alonso Salas

Hospital de Zamudio, Bilbao, Spain

\*Corresponding author.

doi: 10.1192/j.eurpsy.2023.733

**Introduction:** In the last decade, the prevalence of THC use is increasing among adolescents and adults. There is also strong evidence to suggest that cannabis use is associated with psychiatric comorbidities. The strongest evidence is found between cannabis use and psychotic disorder. However, the literature shows that those who have used cannabis in the past or for a large part of their lives are at higher risk of mood disorders, anxiety, personality disorder or other drug use than those who do not use cannabis in a harmful way.

**Objectives:** To provide an overview of the association between cannabis use and the different mental pathologies presented by the patients admitted during the study period. To describe the prevalence of THC use in the study according to the mental pathology presented by the patient.