

Significant Contribution of Neural Regulation to Immune Recognition of Self and Else: A Hypothesis from the US Member of Satellite Group

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Editorial

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ABSTRACT

It has been made many achievements on neurosciences in television. Herein, it is communicated via the author a new hypothesis raised by a US Member of Satellite Group, which has also been manifested in television together with the unification of four forces in physics with electromagnetism. It was newly suggested that the external noxious stimulus would elicit both neural and immune responses in inflammation, with the neural responses amplifying the immune activation against the external stimulus by such cells as the helper T cells, basophils and so on; while the healthy tissues elsewhere could not elicit these neural and immune responses, there with the immune suppression predominating by such cells as the suppressor T cells, eosinophils and so on. Besides, herein it is also collected some updated evidence to support this hypothesis from the US Member of Satellite Group, including the autoimmune diseases, the evolutionarily ancient neuroinflammation, and the neural immunoregulation of gut commensal microbes.

EDITORIAL

Immune recognition of self and else has been the subject attracting the attention of scientists for many decades. At present, most scientists accept the theory of clonal deletion, which is the removal through apoptosis of B cells and T cells that have expressed receptors for self before developing into fully competent lymphocytes^[1]. This prevents B and T lymphocytes from recognizing and reacting to self, and prevents destruction of self-host cells. It is common knowledge that there are many autoimmune diseases, demonstrating that many self-reactive cell clones are not cleared.

However, because there is no other satisfactory theory to be able to account for the immune recognition of self and else, the theory of clonal deletion still dominates in immunology.

In this article, it is introduced a new hypothesis from a male US Member of Satellite Group to explain the immune recognition of self and else. On October 18, 2015, while I and the satellite group were successfully utilizing the infrared thermo-acoustic laser sounds from satellites to lead the world people in television to altogether work on the great movement of unifying the four forces in physics with electromagnetism^[2,3], he supposed to me that the external noxious stimulus would elicit both neural and immune responses in inflammation, with the neural responses amplifying the immune activation against the external noxious stimulus by such cells as the helper T cells, basophils and so on. Whereas, the healthy tissues elsewhere could not elicit these neural and immune responses, where the immune suppression predominated by such cells as the suppressor T cells, eosinophils and so on. With the satellite and television networks, this hypothesis was soon propagated and recorded in various situations of television broadcasts worldwide, together with the great achievements in television of unifying the four forces in physics with electromagnetism. There are many lines of evidence in support of this new hypothesis from the US Member of satellite group. In this article, they are listed as followings in several aspects: (1) It is common knowledge that there are many autoimmune diseases, demonstrating that many self-reactive cell clones are not cleared, by which this theory can explain the immune recognition of self and else while the theory of clonal deletion faces difficult. (2) It is widely studied that the central and peripheral neural systems work together to activate and amplify the local inflammatory responses that contain or eliminate invading pathogens^[4,5]. (3) It has been demonstrated that, in the primitive animal *Caenorhabditis elegans* with its immune system rarely developed in evolution, the

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nervous system may sense inflammatory responses and respond by controlling stress-response pathways at the organismal level^[6]. This phylogenetic result has clearly demonstrated that the neural regulation of immune recognition of self and else is ancient even earlier in evolution than the appearance of most immune cells. (4) It is common knowledge that there are various commensal microbes in the gut of host animals, living well along with the immune system of host^[7,8]. It has been demonstrated that the neural networks of host play the key role in determining the immune regulation as indifferent or allergic to the gut microbes^[9]. In all, it was earliest hypothesized by a US Member of Satellite Group and is herein supported as evident that the neural response and regulation contributes significantly if not all to the immune recognition of self and else.

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