

EAST MEETS WEST

***Wei Qi* and Mast Cells**

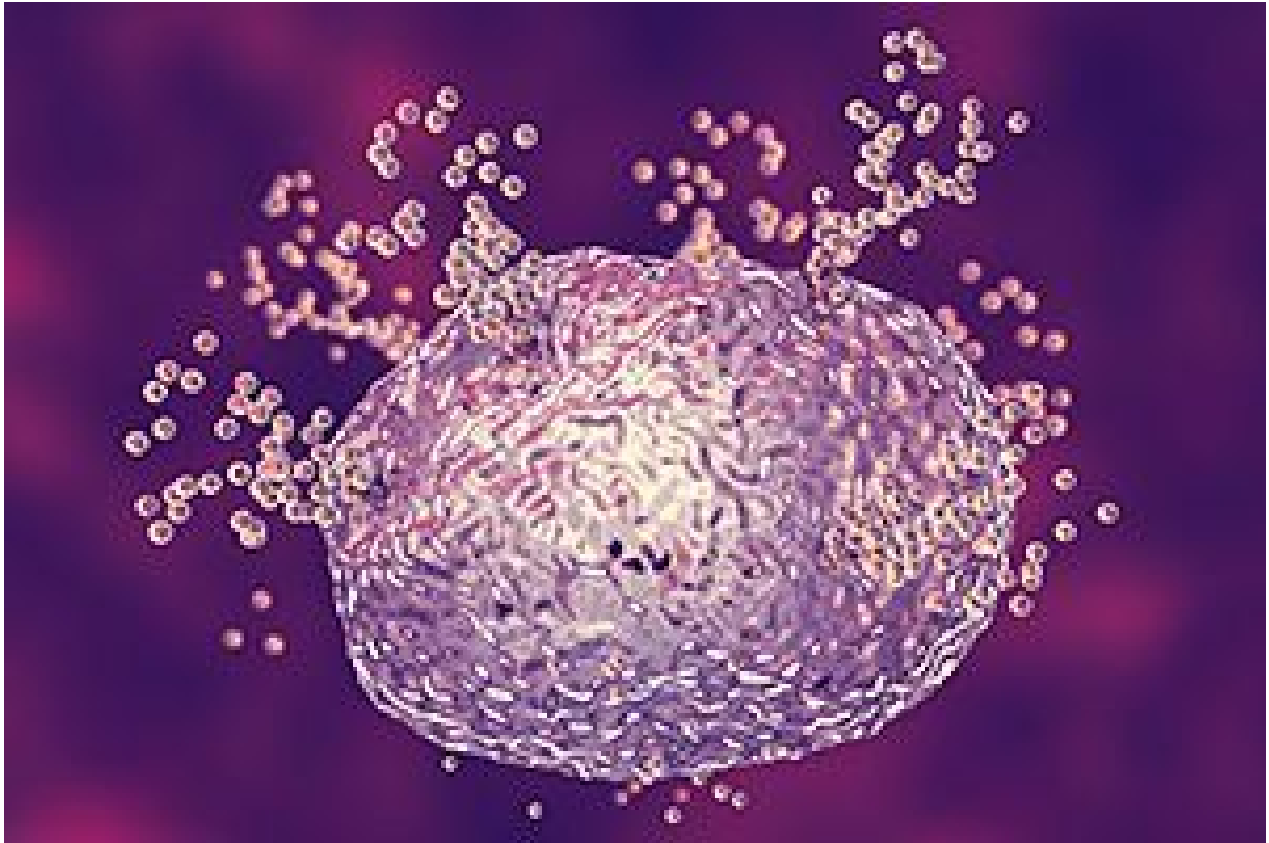
Wei (Vivien) Zhang, LAc

Editor's Note: This is the continuation of an intriguing discussion by the author in the [March issue](#) under the title, "Acupuncture Points and Mast Cells."

Qi is the foundation of acupuncture points. Mast cell distribution is correlated to acupuncture point distribution,¹ as discussed last issue. It is a safe assumption that mast cells are the equivalent entity (or one of the entities) of *qi* for the modern medical world. So, do mast cells (MC) have a role in *de qi* - the *qi* manifestation? To answer this question, let's start by reviewing what a mast cell is and what a mast cell does.

The Mast Cell

A mast cell is an innate immune cell, and rapidly responds to invading bacteria, parasites, fungi, and viruses. In addition, mast cells can be activated by physical stimuli. As the resident inflammatory cells, mast cells are activated immediately after injury, in the inflammatory phase of healing. Mediators stored or synthesized in mast cell granules, like histamine, TNF- α , prostaglandins, interleukin (IL)-1, and IL-6, are released and stimulate inflammation, induce vascular permeability and adhesion molecule expression on endothelial cells; as well as recruit circulating inflammatory cells to the wound site.¹



A needle halo phenomenon has been observed. The acupuncture needle halo is a round, oval or irregularly shaped flush area that appears at the needling point, mostly not higher than the skin; the edges are relatively fuzzy. This phenomenon occurs after *de qi* and the needle is retained, and can continue for several hours after the needle is released.

There are not many records of needle halo in the literature. Some literature contends that the appearance of skin flushing is the process of acupuncture leading the meridian energy to gather in the local area, the process of fighting between good and evil *qi*, and the evil *qi* being expelled. It is a very good sign.

The mechanism underlying the needle halo phenomenon may be that after acupuncture, tissues in the acupoint area are traumatized, mast cells are activated, and biologically active substances such as histamine, acetylcholine, serotonin, and bradykinin are released, resulting in vasodilation and increased vascular permeability, forming a flush-needle halo.²

Wei Qi and Mast Cells

If the needle halo is the process of exorcising evil *qi*, then *wei qi* is the protagonist in this process. Would mast cells be the foundation of *wei qi*? Let's review these two based on their territory and functions.

Wei qi, the subtle *qi* produced by food and drink, floats outside and travels through the body, meridians and joints of the limbs, and does not travel through the meridians and blood vessels.³ The function of *wei qi* is to warm and nourish muscles and skin. *Wei qi* is omnipresent. It performs functions related to the internal organs in different parts, and its states are different. Its functions are involved in the *qi* promotion of internal organs, the extremity of the limbs and the defense against evil.⁴

The character of mature mast cells differs depending on their location. Mast cells are often categorized based on their location. Mast cells with different tissue origins vary in the type or amount of stored mediators.¹ Mast cells are not typically found in the bloodstream; they reside in connective tissue, especially at places where pathogens or foreign substances enter, such as skin, respiratory mucosa and the gastrointestinal tract. They are found in the connective tissue wrapping around blood vessels, nerves, smooth muscle cells, mucus glands, and hair follicles.⁵

Mast cells have important positions in immunomodulatory function and respond to invading pathogens rapidly.⁵ MC derive from bone marrow and are not typically found in the bloodstream, but instead circulate as immature hematopoietic progenitors and mature locally after reaching resident tissues.¹ Both *wei qi* and mast cells serve as the guardian angels of our body, patrolling outside of the blood vessels.

Ci Wei Needling Technique

Distinguish the depth of acupuncture according to the types of *qi*, such as *wei qi* and *rong qi*. *Nan Jing*⁶ advocates that acupuncture for *wei qi* is suitable for shallow acupuncture, and acupuncture for *rong qi* is suitable for deep acupuncture.

Acupuncture *wei qi* does not hurt *rong qi*; it is suitable for shallow needling and horizontal needling along the skin (*wuo zhen*, lying needle). To pierce *rong qi*, press the acupoint with the left hand first to disperse the *qi* and then insert the needle.

The correlation between mast cell distribution and acupuncture point distribution [March article] suggests mast cells are a tissue target of acupuncture.⁷ *Ci wei* needling technique will lead to more tissue traumatization in the needling area; followed by more activated mast cells and degranulation; and most likely better healing potential in the inflammatory phase triggered by acupuncture.

References

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