The Heat/Excitation Tissue State

The heat/excitation tissue state is oftentimes confused as simple inflammation, and while the signs and symptoms of inflammation are certainly associated with this pattern, it is important to not simply equate heat/excitation with inflammation because there can be different underlying tissue states at the root of the inflammatory process. That being said, the main indicators of heat/excitation are similar to that of inflammation: heat, swelling, redness and tenderness or swelling.

This is a very important point, because heat can actually be a secondary tissue state in response to something deeper. The 2 other states that tend to create heat are the damp/stagnation tissue states and dry/atrophy. The prior would be what in Chinese Medicine is called damp/heat, which is a response of the vital force to try to remove stagnation, whereas the latter would be referred as yin deficiency, where there are not enough fluids to adequately keep the tissues moist and thus cool. There is also the category of “heat from cold,” which of course sounds totally counterintuitive. But here we are looking at depression of the tissues and again a vital response to try and stimulate them back into action. These are not technically considered “true heat” as they are arising from a different underlying energetic cause.

“There are several different kinds of heat. Only that associated with an acceleration in the rate of tissue function- an increase in the innate heat of life- is associated with the irritated tissue state.” (Matthew Wood)

A key facet of the heat/excitation tissue state is that the tissues are overactive or hyper-metabolic. This means that there will be excess activity and breakdown of the tissues, oxidative stress, and irritation. Actually another term for this tissue state is “irritation,” though like inflammation it is not an ideal word as irritation can also be due to different underlying tissue states.

I really like the term “excitation” for this particular state. Obviously this is a term that we use to refer to a particular psychological state. I like to think of a child on Christmas eve or the day of their birthday and how excited they are. Think of the energy of an excited child- they have a lot of energy, there’s oftentimes a lot of movement, quickness, and excessive activity. If you think of the energy of an excited child, and place it into a particular organ that gives you a good picture of the quality of the heat/excitation state.

Joseph Thurston described this state as an “exaggeration of the normal function-rate.” Basically he is referring to metabolism being too high, meaning that there is an accelerated rate of breakdown of the tissues- things are moving too fast. In modern terminology we typically refer to this as the oxidation process. The tissues are too easily stimulated into acting and are in a sense hypersensitive.

The general signs and symptoms of this tissue state include burning sensations, increased body temperature (hyperthyroid), fever and immunological hypersensitivities (allergies, autoimmunity, systemic inflammation), nervous excitability (insomnia, nervousness, too much movement, rapid heart rate), pain sensations that are sharp in nature as opposed to dull, red
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coloration to the skin and tongue, sensations of warmth, and sensitivity to hot weather, foods and drinks.

Indications on the tongue include red coloration to the tongue body, yellow coloration on the coating of the tongue, and a sharp pointed tongue of medium width (Matthew always refers to this as the “flame shaped tongue”). The pulse will typically be rapid and superficial (high or beating close to the surface). The overall vital force in this tissue state tends to rise up and out, similar to the way a fire radiates its heat outwards. In this way the blood is typically pushed towards the surface, hence redness in the face, the rapid superficial pulse, and sharp rising type symptoms.

Some good examples of the heat/excitation tissue state include common ailments such as ulceration of the stomach or duodenum, acid reflux or GERD, overly sensitive respiratory conditions where to simply breathe hurts because the lungs are so sensitive, many allergic responses, burning urinary tract infections, high blood pressure associated with stress (HPB can be due to a variety of tissue states), sunburn (any burn really), rapid transit time of digestion, hyperthyroidism, fever, and canker sores.

From an Ayurvedic perspective, the heat/excitation tissue state would be associated with the pitta constitution. Chinese Medicine would refer to it as an excess of Yang or primal Fire. Medical Astrology reveals that this tissue state is primarily aggravated, triggered, or one is predisposed to when the planet Mars is in excess. The Sun can also generate heat. All of the Fire signs are prone to heat/excitation- Aries, Leo, and Sagittarius.

Categories of Herbal Therapeutics

As far as our herbal therapeutics, we have a few different categories of plants that will be specific for this tissue state. Naturally, of these remedies will be energetically cooling though through different biochemical and energetic mechanisms. Although is Ayurveda the sour flavor is considered to aggravate pitta and heat conditions, this is likely because their basis for the sour flavor was vinegar which is acidic and warming. But if we look at a majority of our plants that are sour in flavor, we note that they are pretty much all universally cooling. This is also why berries are especially refreshing and cooling in the heat of the summer, or the common drinking of lemonade. These sour remedies are mostly fruits, such as Hawthorn ([**Crataegus monogyna**]), Elderberry ([**Sambucus spp.**]), Hibiscus ([**Hibiscus spp.**]), and Rose hips ([**Rosa spp.**]).

Bitter remedies are almost universally cooling, though here it is important to mention that we are referring to true bitters, that is, plants that don’t also have mixed aromatic/carminative properties from containing essential oils. The ones are that are really beneficial here are the bitter nervines which help to cool down excessive heat both in the digestive system as well as sedative nervous excitability and irritation. Many of these are mint family plants, like Skullcap ([**Scutellaria lateriflora**]), Motherwort ([**Leonurus cardiaca**]), and Bugleweed ([**Lycopus virginiana**]). Other bitter nervines effective here are Blue Vervain ([**Verbena hastata**]) and Hops ([**Humulus lupulus**]). In general most bitters will be effective here as well, though many of them tend to be more specific for the damp/stagnation tissue state as most are cleansing alteratives.
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Because heat patterns can oftentimes arise due to a lack of fluids, or the yin deficiency pattern, we see that most of our demulcents are quite effective for the heat/excitation tissue state. Their cooling action is really a secondary effect of moistening an overly dried out tissue, but nonetheless they are quite effective. These would be remedies such as Marshmallow (Althea officinalis), Slippery Elm (Ulmus rubra), Chickweed (Stellaria media), Solomon’s Seal (Polygonatum spp.), Plantain (Plantago major), and Linden (Tilia europea). We will discuss these again under the dry/atrophy tissue state.

While the heat/excitation tissue state is commonly attributed to acute immunological type imbalances, when it is present over a long term period of time it tends to powerfully effect the cardiovascular system in an adverse way. This is due to excessive oxidation within the tissues weakening the capillary beds, leading to excess LDL cholesterol in the system, and irritation of the heart itself. In this regard many of our cardiac medicines are extremely beneficial here, such as: Yarrow (Achillea millefolium), Hawthorn (Crataegus spp.), Lemon Balm (Melissa officinalis), Motherwort (Leonurus cardiaca), and Linden (Tilia europea).

Below are some general listings of plants that are beneficial for the heat/excitation tissue state by the different organ systems of the body.

**Digestive System**
- Bugleweed (Lycopus virginica)
- Chamomile (Matricaria recutita)
- Dandelion root (Taraxacum officinale)
- Licorice (Glycyrrhiza glabra)
- Marshmallow (Althea officinalis)
- Peppermint (Menta x piperita)
- Wild Cherry (Prunus serotina)
- Wild Rose (Rosa spp.)
- Yarrow (Achillea millefolium)
- Yellow Dock (Rumex crispus)

**Liver/Gallbladder**
- Burdock (Arctium lappa)
- Dandelion root (Taraxacum officinale)
- Wild Bergamot (Monarda fistulosa)
- Yarrow (Achillea millefolium)

**Respiratory System**
- Elderberry (Sambucus spp.)
- Hawthorn berry (Crataegus spp.)
- Licorice (Glycyrrhiza glabra)
- Rose (Rosa spp.)
- Wild Cherry bark (Prunus serotina)
- Yarrow (Achillea millefolium)
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**Cardiovascular System**

Hawthorn (*Crataegus spp.*)
Lemon Balm (*Melissa officinalis*)
Linden (*Tilia cordata*)
Motherwort (*Leonurus cardiaca*)
Rose (*Rosa spp.*)
Yarrow (*Achillea millefolium*)

**Urinary Tract**

Chickweed (*Stellaria media*)
Cleavers (*Galium aparine*)
Couchgrass (*Agropyron repens* or *Elymus repens*)
Cornsilk (*Zea mays*)
Hibiscus (*Hibiscus spp.*)
Linden (*Tilia europeae*)
Marshmallow (*Althea officinalis*)
Uva-Ursi (*Arctostaphylos uva-ursi*)
Wild Bergamont (*Monarda fistulosa*)
Yarrow (*Achillea millefolium*)

**Female Reproductive System**

Dandelion root and leaf (*Taraxacum officinale*)
Peony (*Paeonia officinalis*)
Skullcap (*Scutellaria lateriflora*)
Trillium (*Trillium pendulatum*)
Yarrow (*Achillea millefolium*)
Yellow Dock (*Rumex crispus*)

**Nervous System**

Blue Vervain (*Verbena hastata*)
California Poppy (*Eschscholzia californica*)
Chamomile (*Matricaria recutita*)
Hops (*Humulus lupulus*)
Lemon Balm (*Melissa officinalis*)
Motherwort (*Leonurus cardiaca*)
Passionflower (*Passiflora incarnata*)
Skullcap (*Scutellaria lateriflora*)
Wild Lettuce (*Lactuca viridis*) - Note: it is cooling in higher doses, treats cold in low doses

**Lymphatic/Immune**

Cleavers (*Galium aparine*)
Elder berry and flower (*Sambucus spp.*)
Hawthorn (*Crataegus monogyna*)
Lemon Balm (*Melissa officinalis*)
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Peach leaf (*Prunus persica*)
Red Clover (*Trifolium pratense*)
Rose hips and petals (*Rosa spp.*)
Skullcap (*Scutellaria lateriflora*)
Wild Bergamont (*Monarda fistulosa*)
Wild Cherry (*Prunus serotina*)
Yarrow (*Achillea millefolium*)

These lists of herbs are obviously not exhaustive, but allows you to begin to get a sense for remedies with different organ affinities that will be effective for the heat/excitation tissue state as it expresses throughout different areas of the body. Notice that there are a handful of remedies that are essentially “universals” for this tissue state and operate in a wide variety of organ systems, such as Yarrow (*Achillea millefolium*), Wild Cherry (*Prunus serotina*), Rose hips (*Rosa spp.*), and Hawthorn (*Crataegus spp.*).