Happy 4th of July, ya’ll.

**Mechanisms of Disease, Diagnostics, Treatment Strategies**

**Mechanisms of Disease**

1. Definition of Disease.
   Disease is a process of fighting between pathogens and upright (Zheng) Qi resulting in disharmony or imbalance of the body.

   Disease can be functional or organic. Functional only affects the channels and Qi/energy flow. Functional diseases show negative results in laboratory tests. Organic causes affect the Blood and internal organs. Organic diseases show in tests as viruses, bacterial infections, etc. Organic diseases develop from functional problems.

   Some western docs know there is something between OK and scary lab results. Some diseases are diagnosed by symptoms – fibromyalgia for instance which manifests as wandering pain, chronic fatigue and a tenderness in 11 of 18 key points when palpated. In fibromyalgia, incidentally, all of these points happen to be acu points.

   There are two terms that define the percentage of Zheng/Upright Qi and the percentage of pathogen: excess and deficiency. It’s sort of the TCM version of a football score to determine who is currently ahead in the game.

2. Excess and Deficiency Syndromes
   a. Excess Syndromes or Conditions
      i. Zheng/Upright Qi is still strong, but so are the pathogens
      ii. Result = severe symptoms and a strong reaction.

      Some symptoms might include high fever, red face, cough with yellow mucus, sore throat (such as in Strep A), swelling, fast pulse.

      Treatment would be to sedate/expel the pathogen even though this also sedates the Zheng Qi too. In TCM the principle is stated as “Sedate the Excess.”

      The Excess is the measurement mentioned at the end of point 1 above.

   b. Deficiency Syndromes or Conditions
      i. Upright/Zheng Qi is weak. Pathogens can be either strong or weak.
      ii. Result = reaction is weak.

      Because the reaction is weak you cannot tell if the pathogen is strong or weak. Why? Because if the Zheng Qi is weak there just won’t be much of a fight. It’s like a bad football team – they lose so easily there’s not much drama.
Theoretically, the pathogen will be weak as well because there won’t be much need for a strong show of force.

Treatment would be to tonify the deficiency of the Zheng Qi. Will this also tonify the pathogen? Most likely, but if the Zheng Qi gets stronger this is still ok. Note that this will intensify the fight and thus the symptoms because both fighters are now stronger. Once the Zheng Qi is strong you can then sedate the pathogen. The Zheng Qi may even do this on its own.

In Pathophysiology I you will probably talk about how elderly people don’t have the same reactions to disease that younger people do. For instance, a younger adult will present with UTI symptoms such as burning urination, fever, pain, etc. An elderly patient probably won’t present with any symptoms at all except for darker colored urine. Eventually, however, they’ll suddenly get delirious for no reason that is readily apparent. One of the first things a doc checks at this point is for UTI. This can serve as anecdotal evidence that Zheng Qi is more likely to be weaker in an elderly patient than in a younger adult.

Excess – This is the first stage of a disease, the acute phase. The pathogen invades, the problem starts

c. Gauging Excess and Deficiencies
   The disease processes as described here apply to all diseases. You put percentages on how much excess or deficiency there is to help determine your treatment plan – will you tonify the deficiency or sedate the excess. These measurements also help determine how big the fight between the Zheng Qi and the pathogen is.
   i. Excess
      This is the first stage of a disease, the acute phase. The pathogen invades and the symptoms start
   ii. Combination of Excess and Deficiency
      This is the middle stage of a disease. There are three possible scenarios:
      1. More excess with less deficiency
      2. More deficiency with less excess
      3. Half deficiency, half excess.
   iii. Deficiency
      This is the late chronic stage of a disease

3. Yin and Yang Disorder
   a. Yin and Yang Excess
      Excesses reflect the acute stage of a disease. Acute is defined as less than 21 days in duration.
      i. Yang Excess
         Symptoms
         1. The four greats (thirst, sweat, pulse, fever)
         2. Talk loudly
         3. Manic behavior
ii. Yin Excess
   Symptoms
   1. History of common cold
   2. Chills
   3. Aversion to cold
   4. Cold pain
   5. No sweating
   6. Pulse: superficial, tight
   7. Tongue: normal

b. Yin and Yang Deficiencies
   Deficiencies reflect a chronic stage of disease – it’s been around a while by now.
   Chronic is usually defined as a condition/disease with a duration of more than 21 days.
   i. Yang Deficiency
      Symptoms
      1. Pale face
      2. Cold extremities
      3. Cold can be alleviated by warming therapies
      4. Watery diarrhea
      5. Cold pain with desire for warming
      6. Tongue: pale, swollen with a wet, moist coating
      7. Pulse: deep, weak, slow.

   ii. Yin Deficiency
      Yin Deficiency is a chronic stage or age related disease (think menopause among other things)
      Symptoms
      1. Night sweats
      2. Palm heat (hot sensation in the palms and soles of the feet)
      3. Tidal fever (light afternoon fevers)
      4. Red face, but only in cheekbone/zygomatic area while the rest of the face is pale
      5. Hot flashes
      6. Tongue: red, think and small with cracks; very little or no tongue coating, often called “peeled” tongue. Might also see tongue coating on some places but not others. That’s called “map” coating because it looks like a world map.
      Cat note: See that tongue picture above? That’s a tongue with a lot of cracks in it that can be a symptom of Yin deficiency. I think of Yin in the body as a parallel to the moist cool earth of this planet. When there’s no rain and the soil dries it often cracks like because the moist and cool is gone from the earth – another type of Yin deficiency.

To diagnose a condition as either a Yin or Yang disease you have to determine if there’s hot or cold and if the condition is excess or deficient. (You’ll learn a lot more about this in Diagnostics I and II.) Example: hyperthyroid is a Yin deficiency and generates a lot of
heat. Hypothyroid is a Yang deficiency of either Spleen or Kidney and generates an awful lot of cold.

4. Internal Organ Disharmony
Dr. Wu will cover this with you in class.

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Diagnosis

There are lots of ways to diagnose a disease, but this one is the most basic. In Diagnostics you’ll learn this as the Eight Principles. They are pairs: exterior/interior, hot/cold, excess/deficiency, and finally Yin/Yang which is the culmination of the other 6. You determine first whether a problem is exterior or interior. Then you move on to is it hot or cold in nature. Then excess or deficient. Add it all up and you can see whether a problem is more Yin or more Yang.

Like this:
1. What’s the location of the problem?
   a. Exterior
   b. Interior
2. What is the property or nature of the problem?
   a. Heat
   b. Cold
3. What’s the situation or current condition?
   a. Excess
   b. Deficient
If you answered all A’s, it’s a Yang Syndrome. If all B’s then it’s a Yin Syndrome. Can it be more complex than that? Yup. You still use the same principles, though and determine which there is more of: Yin or Yang.

Here’s an example: Cough or asthma due to deficient heat in the Lungs.

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<th>Question</th>
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<td>Is it internal or external?</td>
<td>Internal</td>
<td>YIN</td>
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<td>Is it excess or deficient?</td>
<td>Deficient</td>
<td>YIN</td>
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<tr>
<td>Is it hot or cold?</td>
<td>Heat</td>
<td>YANG</td>
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Overall: YIN

Components of Treatment Diagnosis
1. A western medical diagnosis
2. Chinese disease name
3. Differential diagnosis, pattern differentiation or syndrome
4. Location of disease
5. Property of disease (external/internal, heat/cold, excess/deficient)
6. Principles of treatment
7. Selection of acupoints, herbal formulas, other treatments.

**TCM Treatment Principles**

1. Tonify Upright/Zheng Qi and body constitution while sedating pathogens
   Disease is a process of fighting between Zheng Qi and pathogens. Know when to sedate and when to tonify.
   a. Single Excess
      Sedate excesses
   b. Single Deficiency
      Tonify deficiencies
   c. Combination of Excess and Deficiency
      That’s far more likely! The treatment depends upon the situation…
      i. More excess with less deficiency
         Treatment: sedate first, then tonify
      ii. More deficiency with less excess
         Treatment: tonify first, then sedate.
      iii. ½ deficiency with ½ excess
         Treatment: tonify and sedate simultaneously.

Example: Cancer. In the US, the survival rate is lower than in China or Japan. In these countries a DOM (doc of oriental med) is involved in treatment in addition to Western cancer therapies. The DOM gets the patient stronger with herbs and acupuncture prior to
chemo and radiation treatment as afterwards so that the body takes a smaller hit from the toxins involved in treatment which lower the body’s strength. As an acupuncturist you can make a plan for the patient. Radiation and chemotherapy is a sedation type therapy. On OM doc follows up with Shi Guan Da Bu Tang is a tonifying treatment to help the body recover. The combination of treatment types improves the quality of a person’s life and increases survival rates.

2. Regulate Yin and Yang
   a. Sedate Yang Excesses
      Do this through blood letting, gua sha, cold herbs
   b. Sedate Yin Excesses
      Do this through moxibustion in the upper part of the body a swell as with acrid and pungent herbs.
   c. Tonify Yin Deficiencies
      Use herbs, acupoints form the lower Yin channels of the foot (Kidney, Spleen, Liver).
      Use dietary therapies for this too – salmon for instance builds blood and essence.
   d. Tonify Yang Deficiencies
      Use warm herbs, and dietary therapy (shrimp, coffee and other foods that tonify Yang).

3. Distinguish root from symptoms
   Root in Chinese is “ben” which is the cause of a disease. Symptom in Chinese is “biao.” Both are relative terms.
   a. In emergency or acute situations one should treat the biao/symptom.
      Acute asthma for example, you treat the symptoms of shortness of breath and wheezing.
   b. In chronic situations you treat the ben or root.
      Chronic asthma for example between attacks you treat the cause of the asthma.

4. Treat disease according to climactic and geographic conditions as well as individual constitution.
   In Spring for instance, focus on removing wind from the upper body. Depression is worse in Yin seasons of fall and winter. For men, work on the Kidneys and for women work on the Liver. Gender, age, etc all affect treatment.

   Tailor make herbs when possible for individual constitutions – better than the prefab formulas as a general rule.

Remember people are in constant flux so much so that even acu points can move a little (palpate to pinpoint).

Good luck in future classes. Remember to look back at these notes when you get stuck and can’t figure something out, especially when you get to Diagnostics.