Candidiasis: Yeast Meets West

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Candidiasis

andidiasis, a controversial disease, deserves increased recognition as it may have already perpetuated into epidemic proportions within the population. Candidiasis is an infection of the Candida species within the mucus membranes that usually occurs in the skin, respiratory tract, vaginal area, genital region, gastrointestinal tract, mouth, or in the bloodstream. The fact that some physicians only suspect candidiasis in severely immunocompromised patients, coupled with lack of clinical information, allows the general populace suffering from candidiasis to live without an accurate diagnosis, much less proper treatment. Depending on the detection of candidiasis, the extent and location of initial proliferation, and secretory or non-secretory blood phenotype, traditional Chinese medicine (TCM) diagnosis may vary from early stage spleen qi xu (deficiency) to late stage blood xu with dampness or phlegm.

Intestinal Dysbiosis and Antibiotics

Some causes of Candida sp., particularly Candida albicans, transforming into a pathogenic state stem from intestinal dysbiosis (intestinal flora that have harmful effects), often a side affect of medications. As antibiotics are prescribed to eradicate bacterial infections, much of the friendly bacterial flora, acidophilous in the small intestine and bifidus in the large intestine, are also destroyed. Further research at the University of Pavia in Italy "tested the effect of five antibiotics on the candidacidal activity of human white blood cells (WBC) capable of ingesting and killing bacteria. Each of the antibiotics blocked the actions of the WBC against Candida albicans."1 Once the delicate ratio of friendly bacterial flora and Candida sp. becomes disrupted, Candida sp. can proliferate into pathogenic proportions.

Although *C. albicans* usually exists harmoniously in the human body, it can become dimorphic, metamorphisizing into a pathogen. The aftermath of medications such as antibiotics, cortisone and steroids, birth control pills and patches, and the "morning after pill" can drastically change the delicate milieu of co-existing microorganisms within the body's terrain. David

Feldman, MD, at Stanford University states that C. albicans has a steroid-binding protein that binds corticoids and progesterone; hence, patients on these medications or women with multiple pregnancies may be more susceptible to candidiasis.2 Steroids and antibiotics administered to factory-farmed animals are consumed through meat and dairy with possible long-term effects of C. albicans.3 Another contributing cause of C. albicans includes a diet high in sugars, carbohydrates, and alcohol. Simple sugars ingested readily serve as a source for further Candida sp. proliferation, as do steroids and progesterone. Often, a compilation of factors can set the environment for C. albicans opportunistic growth.

According to author Stanley Weinberg, C. albicans in its pathogenic state is known to release seventy-nine toxins. The intestinal tract is an area where C. albicans overgrowth thrives and "the excessive toxins will make membrane linings in the gut leak" which weakens the epithelial lining, whereby large protein molecules permeate into the bloodstream, causing a variety of food allergies.4 A yang ming headache after food intake is one possible clue to this type of food allergy. Upon lacking enough nutrients, the Candida sp. grows hyphae, or threadlike filaments. On the tip of the hyphae, the enzyme phospholipase can penetrate the cell wall by splitting fatty acids, enabling the Candida sp. to utilize nutrients within the human cell.

Non-Secretor Phenotypes

In genetics, a person can either be a secretor or a non-secretor. If one is secretor, this is defined as one who secretes their blood type antigens into their body fluids; a non-secretor is one who puts little or none of their blood type into these fluids. Clinical research has established the significance of ABH blood group antigens. With deeper probing, Peter D'Adamo, ND, and Gregory Kelly, ND, note that "differences in ABH secretor status drastically alter the carbohydrates present in body fluids and secretions;

this can have profound influence on microbial attachment and persistence."⁵ Clinicians have begun to document that non-secretor phenotypes lack certain antigens to reduce binding of *Candida* sp. colonies and "although non-secretors make up only about 26 percent of the population, they are significantly over-represented among individuals with either oral or vaginal *Candida* infection, making up almost 50 percent of affected individuals."⁶

Blood Type Case History: Systemic Candidiasis

Laura was a young woman in her mid twenties, a competitive athlete in college, and a graduate with an MBA. After a miscarriage, she was prescribed antibiotics. This was only the second time in her life she had taken antibiotics. Within two months, symptoms of abdominal bloating, fatigue, loss of appetite, and poor concentration caught her attention. After suddenly rushing away from a dinner party to vomit, she consulted her physician. Blood assays and a barium x-ray of her alimentary tract revealed everything was in range. Her blood type was non-secretor AB-, the rarest of blood types. Current research has established that "women with recurrent idiopathic vulvovaginal candidiasis are much more likely to be ABH non-secretors."7

Laura's poor concentration degenerated to muddled thinking and vertigo. She gave her letter of resignation. When offered a sabbatical, she felt too fatigued and unwell to accept. Laura moved to her weekend home to rest only to deteriorate to the point of being bedridden. Cock's crow diarrhea greeted her every morning. A full figured woman, she noticed her breast size became remarkably smaller in addition to extremely dry skin and leukorrhea. Only by the good fortune of a friend visiting and suggesting she get massage did fate

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change her life. The massage therapist also did hospice work and could see Laura was unwell. After the massage, she gave her a business card of an acupuncturist and said, "You might want to see her...."

Oftentimes, patients bring their laboratory reports performed by specialists with inconclusive findings. This is where TCM combined with the right diagnostic tests shine as a beacon of integrative medicine. One initial office visit provided a Comprehensive Digestive Stool Analysis (CDSA) with a TCM diagnosis of damp heat in the spleen and lower *jiao*, and kidney and spleen *yang xu*. Her CDSA revealed a score of 0 on a scale of 0-4 for both *acidophilus* and *bifidus*. Further panels showed systemic candidiasis and essential fatty acid deficiency.

Treatment protocol included dietary guidelines eliminating refined sugar and alcohol, increasing protein, reducing carbohydrates, and increasing vegetables and gluten-free, yeast free bread. Initial supplements and herbs for three months were: a probiotic (four times daily with meals), organic evening primrose oil (2600 mg daily), lipo-similase plant enzymes (2 capsules three times daily before meals), and a microbial balancing supplement (two capsules three times daily).

Case History Follow Up:

Within a month, Laura's cock's crow diarrhea and yang ming headaches abated. Her abdominal distension, insomnia, and fatigue also gradually disappeared after two months. After three months, a follow up CDSA was taken and her acidophlous level was at 4, while her bifidous level was at only 2; an additional supplementation of two capsules of bifidous four times daily was added to her regime. The supplementation of digestive plant enzymes, which includes lipase to better assimilate essential fatty acids, served to balance the omega-6 essential fatty acid deficiency as revealed by the follow up essential fatty acid analysis. She has returned to her full-time work and sports training while continuing to pay attention to her dietary guidelines.

Case History: Myocardial Infarction

Helen was 72 years old when emergency room intervention and a stint saved her life at Stanford Hospital. Intravenous antibiotics were administered as post-operative protocol. Within three months, abdominal bloating and hiccups presented. She came to my clinic and commented that these "unnatural hiccups keep occurring after meals." CDSA results illuminated Candida overgrowth and a 0 level of acidophilus. Her tongue revealed a greasy white coat and all pulses were slippery. Her blood type was a non-secretor AB-.

Case History Follow Up:

Treatment protocol included moxa on S 36 and Ren 4.

Supplementation of one capsule of probiotics four times daily was given to re-colonize the small intestine with acidophilous. Chinese herbs to tonify the spleen, smooth the liver qi and drain the dampness was given for two months. These included: bo he (Menthae Haplocalyx), bai zhu (Atractylodes Macrocephalae), qing pi (Pericarpium Citrus Reticulatae), mu xiang (Aucklandia Lappa), shi di (Diospyros Kaki), da fu pi (Pericarpium Arecae Catechu), and yi yi ren (Coix Lachryma Jobi). Within two weeks, the hiccups and rebellious stomach qi abated. Follow up CDSA revealed no Candida sp. overgrowth and acidophilous level at 4.

Yeast Meets West

The refinement of TCM diagnosis supplemented with appropriate laboratory tests allows the practitioner to make an accurate diagnosis. The famous Chinese physician Ye Tianshi of the Tang dynasty hypothesized the four level system of diagnosis.8 Within TCM theory, candidiasis may present itself under varied etiologies ranging from the transmission of pathogens through all four levels—from the wei qi, qi, ying, to the xue level. One example of this diagnostic system at the acute stage, or wei qi level, of candidiasis is that it may present as spleen qi xu from the cold thermal nature of antibiotics. Abdominal distension, poor appetite, and fatigue may be initial signs. If left unchecked, Candida sp. or chong (parasites) can infiltrate deeper into the gi level causing dampness, stagnation, and rebellious stomach qi as in hiccups after eating, belching, nausea, or vomiting. As the chong further colonizes its species and reaches the ying



level, particularly in ecosystems of blood types with the subcategory of non-secretors, *yin xu* symptoms can manifest as body fluids become depleted by the chong and/or leukorrhea as the dampness proliferates. Once at the *xue* (blood) level, the *Candida* sp. begin to permeate through the lipid layer of the cell wall to ingest its host nutrients, leading to blood *xu* symptoms. As *Candida* sp. has been found to release toxins, additional turbidity and dampness can transform into phlegm. This phlegm may present itself productively as sinusitis, bronchitis, menstrual blood, or invisible phlegm.

According to Bob Flaws, "When there is spleen vacuity, liver depression, and damp heat, there is often also chong or parasites in the intestines."9 Flaws' further research revealed information on Dr. Heiner Fruehauf's publication regarding observations from the Qing Dynasty on gu chong (parasites) whereby certain herbs were used to promote a regularizing effect on intestinal flora. These included bai zhu (Radix Angelicae Dahuricae), he shou wu (Radix Polygoni Multiflori), lian qiao (Fructus Forsythiae Suspensae), zi su ye (Folium Perillae Fructescentis), bo he (Herba Menthae Haplocalycis), and wu mei (Fructus Pruni Mume). Here again is another association concerning the delicate balance of intestinal flora and the presence of *qu chong*, or parasites.

Acupuncture Points

With TCM treatment of candidiasis, tonifying and regulating the spleen and stomach qi, smoothing the liver qi, and dispelling dampness serve as a basis for treatment protocol. Acupuncture points used include: Sp 4, Sp 6, and S 36 with tonifying technique to support the digestive system, K 3 for overall tonification because candidiasis can overtax the adrenals, Liv 3 sedate, Sp 9 to dispel dampness, L I 4 with Liv 3 for balancing gi and blood, L I 11 sedate to clear excess heat, Ren 3 (front mu point of urinary bladder), Ren 4 (front mu of small intestine), Ren 12 (front mu of stomach), and S 25 (front mu of large intestine). Additionally, moxa is used on S 36, Sp 4 (source point of the spleen and master point of the chong extraordinary vessel), K 1, and over the general abdominal area if a deficiency is present.

Treatment Protocol

Treatment protocols are broad. For the diet, elimination of simple sugars, increased protein intake, and reduced carbohydrates are paramount. Supplements include B vitamins, vitamin C, biotin, manganese, magnesium, chlorella, and essential fatty acids. Biotin, balanced with other B vitamins and trace minerals, has been found to prevent the transformation of C. albicans into a pathogenic form. Biotin, like vitamin K and B-12 is produced by friendly flora in the intestinal tract. Customized herbal formulae used are based on specific TCM diagnosis. Lastly, gigong exercise helps to stimulate oxygenation throughout the tissues and can provide the foundation towards regaining balance.

Conclusion

In dealing with microscopic pathogens, it should be noted that a general co-evolution of species is occurring from stronger antibiotics and subsequent resistant strains of pathogens. *C. albicans* is one of many species; it has been known to mutate into stronger, more resilient strains. The subtlety of TCM diagnostic theory will address depth, location, and type of imbalance for each unique patient while progressive laboratory tests provide detailed information on intestinal bacterial flora, fatty acid ratios, and *Candida* sp. overgrowth. Health care

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providers also may begin to medically profile non-secretor phenotypes as an adjunct of detailed diagnostic testing leading the way towards preventative medicine.

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Footnotes

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