



HOME

LIVE SEMINARS

DISTANCE LEARNING

WEBINAR

REGISTRATION

LOTUS SPEAKERS

DRUG-HERB SET

BOOKS & NOTES

FAQ

FORUM

DOWNLOADS

ABOUT US

CONTACT US

Upcoming Events

[Understanding the Mechanisms of Acupuncture to Enhance Clinical Outcomes](#)

by Donald Kendall

Location & Time:
Los Angeles, CA
3/6/10 9 am to 6 pm PST

[Multiple Drug Resistance and Chinese Herbal Medicine](#)

by Matt Van Benschoten

Location & Time:
Los Angeles, CA
3/7/10 9 am to 6 pm PST

Multi-drug Resistance and Chinese Medicine

by M.M. Van Benschoten, O.M.D., L.Ac.

Multi-drug resistance is a major issue in the contemporary practice of medicine. Many common pathogenic bacteria have developed resistance to antibiotics, and the practitioner of Chinese medicine often encounters patients who have had several unsuccessful courses of western medication where residual infection and symptoms persist. Pharmacological research on the antibacterial effects of Chinese herbal medicines demonstrates the potential to treat these infectious conditions effectively and with minimal toxicity.

Recent biomedical literature focuses on several important species of multi-drug resistant bacteria, including MRSA (methicillin resistant *Staphylococcus aureus*), VRE (vancomycin resistant *Enterococcus*), *Pseudomonas*, and *Mycobacterium tuberculosis*. Laboratory research has confirmed that Chinese herbal medicines can inhibit the growth of these pathogenic organisms, and in some cases, work synergistically with antibiotics to provide a superior clinical outcome. *Hou Po* (Cortex Magnoliae Officinalis), *Su Mu* (Lignum Sappan), *Bai Zhi* (Radix Angelicae Dahuricae), and *Di Gu Pi* (Cortex Lycii) are representative species with laboratory evidence to support their use in management of these infections.

The formation of biofilms in colonies of bacteria is another significant clinical issue in combating chronic infection. *Shan Zha* (Fructus Crataegi), *Lian Qiao* (Fructus Forsythiae), and *Dan Shen* (Radix et Rhizoma Salviae Miltiorrhizae) are a few of the species identified to inhibit biofilm formation, assisting the penetration of antimicrobial drugs or herbs into the site of infection. Combining antibacterial, antibiofilm, and immunostimulant herbs in a comprehensive strategy for the clearance of chronic infection can produce excellent clinical results.

Viral infections may also exhibit multi-drug resistance. Influenza viruses can become resistant to oseltamivir, amantadine, and zanamivir. Herpes viruses including Herpes Simplex Virus type 2 (HSV-2), cytomegalovirus, and Varicella Zoster Virus (VZV) can become resistant to antiviral medications including acyclovir and foscarnet. Antiviral herbs such as *Ling Zhi* (Ganoderma), *Ji Xue Teng* (Caulis Spatholobi), and *Yu Xing Cao* (Herba Houttuyniae) provide effective therapeutic options when previous pharmaceuticals have failed to resolve infection.

Multi-drug resistance in fungal infections may occur when *Candida*, *Aspergillus*, or *Fusarium* species infect immunocompromised patients. Antibiotic overuse, high sugar intake, and indoor mold exposure increase the risk of fungal illness. Burn victims are highly susceptible to these pathogens. Antifungal herbs such as *Xiang Fu* (Rhizoma Cyperi), *Huang Bo* (Cortex Phellodendri Chinensis), and *Zi Hua Di Ding* (Herba Violae) inhibit the growth of multiple species of fungi, relieving symptoms and assisting recovery.

A major issue in multi-drug resistance is the action of P-glycoprotein. This cell membrane protein acts as a pump, removing toxic substances from the cell. Cancer cells develop resistance to chemotherapy via this mechanism. P-glycoprotein also acts to regulate drug absorption. Bacteria and fungi, including *Staphylococcus aureus* and *Aspergillus* have genes that regulate multi-drug resistance efflux pumps. The use of P-glycoprotein inhibitors can assist the inhibitory effects of antimicrobial herbs and pharmaceuticals. Chinese herbs that inhibit P-glycoprotein include *Ze Xie* (Rhizoma Alismatis) and *Qian Hu* (Radix Peucedani).

The clinical response to cancer chemotherapy may be reduced by the expression of multi-drug resistance genes in tumor cells. Experimental tumor systems that are multi-drug resistant can be used to evaluate new therapies. Breast cancer cells resistant to doxorubicin/adriamycin become more susceptible to the drug when alkaloids from *Gong Lao Ye* (Mahonia) or green tea polyphenol compounds are added to the treatment regimen. Resistance to taxol and 5-fluorouracil can be reversed by administration of *Wu Wei Zi* (Fructus Schisandrae Chinensis) and *Chuan Xin Lian* (Herba Andrographis) respectively.

Resistant hypertension occurs in 20% of diagnosed patients. Three or more pharmaceuticals may fail to adequately control blood pressure, especially in patients who are obese or in those who suffer from obstructive sleep apnea. Hyperaldosteronism is another contributing factor. *Zhu Ling* (Polyporus) and *Dan Shen* (Radix et Rhizoma Salviae Miltiorrhizae) can inhibit the effects of aldosterone and the angiotensin system, improving control of blood pressure in combination with pharmaceuticals that address other targets of the disorder.

Adolescents and older adults experiencing depression have a high incidence of poor response to drug treatment, with failure rates from 40-50%. Patients resistant to the effects of selective serotonin reuptake inhibitors (SSRIs) may have elevated levels of inflammation, due to Interleukin-6 (IL-6) and Tumor Necrosis Factor alpha (TNF-alpha). Chinese herbs with antidepressant effects that also reduce IL-6 and TNF-alpha levels include *Huang Qi* (Radix Astragali) and *Jiang Huang* (Rhizoma Curcumae Longae).

Drug resistant epilepsy can be positively influenced by the anti-seizure effects of Chinese herbal medicines. Up to 30% of patients with epilepsy can be refractory to multiple drugs. *Ji Xue Cao* (Herba Centellae) can reduce the effect dose of several anticonvulsant medications, including phenytoin, valproate and gabapentin by as much as 70%. *Sheng Jiang* (Rhizoma Zingiberis Recens) and *Qi Ye Yi Zhi Hua* (Paris Polyphylla) have antiseizure effects and inhibit the expression of P-glycoprotein, which is expressed in drug resistant epilepsy.

The current scientific literature provides many effective strategies that are evidenced-based for the management of multi-drug resistant illnesses. By assisting patients with a non-toxic, complementary therapy that works in a positive synergism with their current pharmaceutical regimen, the practitioner of herbal therapies can enhance health and well being while contributing to a superior clinical outcome.

About the Author

Dr. Van Benschoten is a graduate of the California Acupuncture College of Los Angeles, with 28 years of clinical, research, and teaching experience in acupuncture, Chinese herbal medicine, and medical Qi Gong. He is the author of more than fifty papers on acupoint diagnostic methods, chronic fatigue syndrome, AIDS, autoimmune disease, breast cancer, mercury toxicity, and indoor mold exposure. His clinical practice focuses on multidrug resistant infections, immune dysfunction, and environmental illness.

Classes by the Author

Multiple Drug Resistance and Chinese Herbal Medicine

3/7/10 LotusSEMINAR @ Los Angeles, CA and Live-streaming LotusWEBINAR

Chronic Fatigue and Chinese Herbal Medicine

6/27/10 Live-streaming LotusWEBINAR

[Complete 2010 LotusSEMINAR and LotusWEBINAR schedule](#)



Lotus Live Seminar

New Topics and New Speakers for 2010 - Come and Join Us!

[Click here](#) for our 2010 seminar schedule and locations.



LotusWEBINAR

View our Real Time Live Broadcast of LotusCEUSeminars from WHEREVER you are.

[Click here](#) for our 2010 webinar schedule.



Stay Connected, Keep Informed

We are now on [Facebook](#) and [Twitter](#)!

Become a fan of Lotus Facebook and follow us on Twitter to receive updated seminar information, exclusive webinar invitations, latest TCM articles and more!



Lotus Institute of Integrative Medicine

PO Box 92493

City of Industry, CA 91715

www.eLotus.org info@elotus.org