

Lung Disease, Asthma, Emphysema, Bronchitis and Lung Cancer: Common Causes and What You Can Do By D. Graeme Shaw, M.D.

Asthma is the most commonly known lung disease, and is increasing in number. Other disorders include chronic bronchitis, emphysema and lung cancer. There have been many theories offered as to their origin, including genetic, allergic and neurologic. My experience leads me to believe that all of these disorders have a common cause — hyperexcitability of the cell membrane.

The cell membrane surrounding the cell has many functions, including control of acid, water and salt balance; transport of nutrients into the cell; excretion of toxins and waste products out of the cells; and intercommunication with other cells.

These activities of the cell membrane generate an electrical charge and this excitability enables the cells to respond to external factors. When the cell is under stress from chemicals, infections, toxins, low energy states and emotional stress, there is an increase in the excitability or electrical activity of the cell membrane.

Cell membrane hyperexcitability is a common factor in many diseases because it results in various cell changes, including decrease of energy, muscle contraction or spasm, inflammation, decreased immune function, fibrosis (scarring) and degenerative disease. If continued long enough, it can lead to cancerous changes.

So, rather than a multitude of potential causes of lung disease, I believe that there is a primary one – cell membrane hyperexcitability. And rather than there being many discrete diseases of the lung, there is actually a spectrum of diseases that have a common pathophysiology (the mechanism of disease production).

As we stated in our published article "BRONCHIAL EPILEPSY OR BRONCHO-PULMONARY HYPEREXCITABILITY AS A MODEL OF ASTHMA PATHOGENESIS" (published in *Medical Hypotheses* 2006, 67, 1042-1051), each of these pulmonary diseases (asthma, COPD/emphysema and lung cancer) may be a single entity in a spectrum of diseases caused by the same underlying mechanism: excitatory dysfunction.

Research has also shown that those patients with chronic asthma, bronchitis and emphysema are more likely to have lung cancer in later life.

What can you do about it? If there is indeed one pathway to lung disease, there

must also be a similar but opposite pathway to lung health.

Benefits of Healthy Diet & Hydration

How do we reverse cell membrane hyperactivity? A healthy diet is the first step. It is the source of life and energy for your cells. Without this invaluable energy, cells must adapt to living with low energy by increasing electrical activity. The worst dietary offenders for cell health are sugar, salt and excess iron (as in red meat).

Some of the simplest nutrients that support lung health are magnesium and omega-3-oil (fish oil), both of which are cell membrane calming agents. I saw a seven-year-asthmatic boy last year whose mother was enthusiastic about getting him off asthma medicines. I suggested that he add fish oil and magnesium to his diet for two or three months. Amazingly, he has been off medications ever since.

Hydration is a very important factor to combat asthma, as dehydration (such as with exercise) causes a release of histamine (excitatory neurotransmitter) which can aggravate bronchospasm. Any supplement that relaxes hyperexcitability is helpful for asthma, including glycine, GABA products, and herbs with these same membrane-calming properties.

Excitement, Anxiety are Triggers

Excitement and anxiety are known to be common triggers for asthma. In my practice, fear, anxiety and especially grieving tend to be common in patients with long-term lung health issues.

I treated a young lady several years ago with an intractable fungal infection of her lungs. Nothing seemed to improve her. After over a year of various treatments, she realized that her grieving over a lost boyfriend had preceded her lung disease. After becoming aware of this, she slowly started to improve. (Coincidentally, my last three female patients who had lung cancer all reported a feeling of grief over lost ones or lost relationships.)

One of the most interesting aspects of this hyperexcitability theory is that there are neurotransmitter sites on the cell membrane that affect electrical activity. Acetylcholine, histamine and glutamate are examples of stimulatory neurotransmitters that heighten cell excitability, whereas relaxing neurotransmitters like GABA and glycine have the opposite effect.

Neurotransmitters are the vehicles of our emotions. Simply put, anxiety-producing neurotransmitters stimulate the hyperexcitability of the membrane, whereas relaxing emotions have beneficial effects on the cells' excitability.

Five Tips for Healthy Lungs

Making healthy lifestyle choices, including a healthy diet, moderate exercise and stress reduction, is a good starting point. (Amazing how these three habits seems to promote almost all organ health.) My recommendations for everyone concerned with lung health are:

- 1. A healthy diet free of excess sugar, sodium salt, iron, MSG (a glutamate derivative) and nicotine (a cell membrane excitatory chemical).
- 2. Relaxation. Some of the common methods of relaxation include breathing exercises, meditation and exercise.
- 3. Hydration. Remember to keep hydrated, especially if you exercise.
- 4. Several specific membrane-calming agents that have helpful affects on lung health are magnesium, omega-3-oil (fish oil), GABA, glycine, vitamin D, and herbs like sophora.
- 5. An herbal combination that can be used to promote overall lung health is found in Get Well Natural's *Breathe Well* formula containing sophora, morinda, atractylodes, schizandra, cudrania, and poria. It's a supportive formula for healthy lung, immune, and cellular function.

If you have any questions regarding the use of herbal dietary supplements to support your health, contact Get Well Natural at contact@getwellnatural.com or call 1-888-522-HERB (4372) or 408-260-9714, or visit the GWN website at www.getwellnatural.com or the offices at 4010 Moorpark Avenue, Suite 119, San Jose, Calif. 95117.

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