

***Mind Over Disease – A Personal Experience***

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***Response of the IMMUNE System to Stress***

***On Meeting the Most Remarkable Dr Edward Chung  
At Del Coronado***

***Introduction***

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Dr Edward Chung  
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Dear Dr Chung

It is delightful to at last attempt contact with you since 1979 at the Del Coronado ACFE Annual Convention, attending your splendid presentation with Dr David Rosengard. For the last few days, although thinking over your ideas for many years, eventual contact was attempted this morning but your phone was engaged and then remained unavailable, as an un-listed number. ACFE HQ, kindly assisted me further this morning with your FAX and address.

By coincidence at the 1979 convention, my local Australian colleague with whom I have worked for many years at Total Care Medical Centre Frankston, Dr “John” Chung was concurrently visiting LA. Unable to attend the banquet that evening as my guest; when seated with other US colleague guests from San Diego including Drs Russel N. Cassel and John K Meyer Meyer and their wives, a FAX arrived with Dr “John” Chung’s apology.

Suddenly and even more coincidentally quite out of the blue, you somehow materialized and were promptly seated at our table with a beaming smile. However, I had attended your most erudite presentation that day with Dr Rosengard. As you recollect for the a-typical Lymphoma case N=1 in Endocrinology, you presented a unique explanation of refugee antigens, retreating to build strengthened plethora in vertebral marrow.

There was something else that you discovered that has direct bearing in my current research in Mind-Body Medicine integrated with mainstream medicine and certainly NOT as “alternative” medicine.

As part of my ongoing software development with computerized biofeedback interfaces for both patients and especially their carers, I would like to see you in New York. Meanwhile, my letter invites email dialogue in preparation to seeing you, hopefully in late August/early September this year.

Yours sincerely

R.H. Brian Costello

***Response of the IMMUNE System to Stress  
Dr Edward Chung NY***

***American College of Forensic Examiners Convention  
Del Coronado CA 1979***

*Ancient Japanese defined disease as “Byouki” meaning “Sickness of the mind”. “Byouki” includes not only our modern Schizophrenia but also every kind of physical and mental illness. Ancient Japanese believed that an uneasy state of mind or stress induces physical illness.*

*Stress is subjective; what is stressful for one individual may not be for another, and what is stressful for one individual at one time may not be for the same individual at another.*

*Many researchers and clinicians have paid attention to the state of mind and body for many decades. Presently, however, no clear pathophysiological mechanism has been understood especially regarding the response of the immune system to stress.*

*The presenter is going to address several heuristic examples in an effort to promote a better understanding of the immune response on a psychoneuroimmunological basis.*

***Example 1:***

*Due to Lupus Erythematosus, a 28-year-old Filipino female underwent immunosuppressive treatment with prednisone. For a while it seemed to be helpful. However, soon it seemed to get worse. The treating physician recommended an increased dosage of the medicine.*

The patient refused and soon thereafter left for her home village in the Philippines. The physician worried that the patient might get to a dangerous point because abrupt cessation of the steroid therapy is dangerous. But three weeks later she returned. "Much to the surprise of the distraught family members and skeptical physicians" the doctor reported "She was normal".

According to her own account, the illness had resulted from a hex put on her by the father of her children and the cure had come about when a witch doctor lifted the curse. Back in the United States, she refused any further medication and was doing so well that she was later able to give birth to a healthy girl. *This is a story published in the Journal of the American Medical Association in 1981.*

**Example 2:**

This is my own experience. On July 10, 1970 while I was taking care of patients in OPD, one of four O.R (Operating Rooms) staff called me to do something for a patient on the surgery table. According to the information from the staff, the surgeon ordered to prepare for surgery, and then he disappeared. No one knew where he was.

Finally, they brought the problem to me because I was the Medical Director of the hospital at that time. I had never seen the patient previously. He was already deeply anesthetized. It was general anesthesia. Fortunately one of the OR staff was the patient's relative and so a brief history was taken. The patient had suffered from GI (Gastrointestinal) trouble for many years. However, he couldn't get the benefit of modern medicine because he lived in a very rural area. Upper GI series revealed a large space-occupying mass in the Greater Curvature of the stomach. Subtotal gastrectomy was done and gastrojejunostomy was performed. Adjacent lymph nodes were removed and sent to the laboratory together with the resected stomach.

The pathological report was metastatic adenocarcinoma of the lymph node and adenocarcinoma of the stomach. I told the patient's wife that he couldn't live for more than 10 months. On October 11, 1976 while I had my stethoscope still attached to a patient's chest in the middle of the examination, a stranger barged into my office and embarrassed everyone in the room including the patient. As soon as he entered the room he introduced himself and said, "I am the person you told would not live for more than 10 months.

My name is Kim Jae Dong. I underwent stomach surgery in the hospital. You resected my stomach with the diagnosis of Stomach Cancer." I joked with him, "You are a ghost. Aren't you? If I told you that you could not live more than 10 months, you should not be here as a living person. My diagnosis was based upon pathological findings." He replied, "No, I am not a ghost. I am a real living man. I eat well. I am healthy. I have no problem. I want to be checked again!" I asked the nurse to prepare the physical examination in the other room. His abdomen was soft and no masses or nodules were palpable.

**Example 3:**

During the Korean War in 1950, two female college students were caught in the middle of a combat zone. The bullets were coming from two different directions. One of the girls swiftly ran and hid herself in a ditch nearby. However, the other girl froze there on the spot and couldn't move. The other one who hid herself safely in the ditch returned and dragged her frozen friend over to the ditch. Later, one of these girls became my wife.

**DISCUSSION:**

Psychological factors such as bereavement, marital separation, legal problems, and even exams in medical school can be a stress. However, stress is subjective; what is stressful for one individual may not be so for another, and what is stressful as one time may not be so at another.

(1,3) Increasing evidence suggests that stress, and the ability to cope with it, is one of the important influences of a patient's health status. In some situations, stress may alter the physiology of an organ system without any apparent association with disease. (2)

In both highly controlled animal studies and less well controlled human research, stress has been shown to alter the immune system and often increase. Challenges were compared between grouped and isolated mice, the isolated mice showed greater adrenal weight, diminished humoral and cellular immune reactivity, and poor tumor rejection. (50) Stressful life events and other psychological factors may increase the susceptibility to illness and mortality (78). In further studies the effect of social and family support on NK cells were determined (77). Activated immune cells are capable of producing and secreting cytokines which in turn may affect the neural system.

**In Example 1:**

The young lady's belief that she had been cursed, and her consequent fear, may have reduced the effectiveness of her immune system. Because the lowest NK cell (Natural Killer cell) activity was observed among individuals suffering from anxiety. (76). Also, stressful life events and other psychosocial factors may increase the susceptibility to illness and mortality (77). Both human and animal studies indicated that stress can exert a suppressive effect on the immune function (78, 79). The visit to the witch doctor, then, might have given her an emotional boost that found expression in her ability to rally against the lupus. Activated immune cells seem to be capable of producing and secreting cytokines which in turn may affect the neural system.

The study of Fawzy (87,88) et. Al. demonstrated that a coping- enhancement group intervention in patient with malignant melanoma showed an increase in natural killer cell activity months later and prolonged survival after 6 years.

Similarly, Ironson et. Al (89) demonstrated significant relation between psychological variable and both immune status and HIV-1 disease progression in a sample of gay men enrolled in stress management intervention groups. Specifically, psychological distress, denial, and low adherence during intervention signals predicted 2 year disease progress. Apparently, her emotional status related with the immune system.

**Example 2:**

The patient lived in a very rural area in Korea and he was a poor peasant. He had to work hard every day to support his family. However, he rather enjoyed reading the books rather than working in the field. His wife was annoyed with her husband and was nagging him almost every day. Finally, he developed indigestion; however, his wife's nagging never stopped.

Due to prominent weight loss and epigastric pain he visited the hospital where he underwent the gastrectomy with the diagnosis of stomach cancer. Apparently, his wife's nagging influenced his immune system.

The lowest NK cell activity was observed among individuals suffering from anxiety. (76) Both human and animal studies indicated that stress can exert a suppressive effect on the immune function. (78, 79)

Following the surgery the doctor told his wife that the patient couldn't live more than 10 months. This information changed her attitude toward her husband. No longer was she nagging; rather she became sympathetic. The patient experienced for the first time real happiness. After the surgery, during the coalescence his wife never nagged even though he was reading the books. With her tender, loving care his attitude toward his wife also changed. They really loved each other. In his immune system, changes took place. Longstanding higher levels of glucocorticoids in circulation reduced to normal.

Activity of the NK cell resumed its function to appropriate levels. In a study of patients with breast cancer in Stage 1 and stage II, Levy et. Al (86) found that the level of NK activity was correlated with perceived social support either from a spouse or from another intimate individual, with perceived social support from the patient's physician, and with a major coping strategy of actively seeking social support.

It is written in Proverbs chapter 17:22, "A merry heart doeth good like a medicine: but a broken spirit drieth the bones" The man developed an immunocompromised state due to the stress his wife has given him by nagging. Finally, he ended up with stomach cancer. However, her dedicated, tender loving care restored the appropriate function of the immune system.

**Example 3:**

Emotional stress may trigger acute myocardial infarction (91),. This is most probably explained by excessive secretion of catecholamines that cause over constriction of the blood vessels, endothelial damage, and increase in platelet adhesiveness and aggregation, increase of myocardial oxygen demand and decrease of insulin secretion. (92). Infusion of catecholamines in dogs caused within minutes showed microscopic evidence of contraction band lesion or over contracted myocardial fibers.

Higher doses of catecholamine caused fatal rhythm disturbance. (93) Contraction band lesions were present also in pilots who had lost control of their aircraft, could not eject and had died before their plane hit the ground (94), probably one of the two girls in Example 3 had a similar experience.

**Conclusion:**

It is evident that stress influences out immune system. I reviewed 3 cases of clinical symptoms together with possible psychological status. In order to keep our health, we have to pay close attention not only to what we eat and how to keep clean our environment but also how to avoid or cope with the inevitable stress. To keep thinking positively and to have an optimistic view is much better than negative thinking with pessimistic ideas.