Healing & Disease Reversal

by Albert Cilia-Vincenti MD FRCPath

This article forms part of a series which will look into Dean Ornish's work, emphasising that there is more to medicine than pharmaceutical drugs and surgery. His clinical research findings on disease reversal, in particular, promise not to be exactly what you've been taught at medical school. He is Clinical Professor of Medicine and Founder President of the non-profit Preventive Medicine Research Institute, California University, San Francisco.

Professor Dean Ornish's clinical research over more than 30 years shows that the progression of even severe coronary heart disease can often be reversed by making comprehensive lifestyle changes. These include a verylow-fat diet containing mainly fruits, vegetables, whole grains, legumes and unrefined soy products; moderate exercise such as walking; various stress management techniques; and enhanced family and social support.

His research has also documented that other chronic diseases may be reversible simply by making comprehensive lifestyle changes. The results of a randomised controlled trial he conducted with Drs Peter Carroll (Chair, Urology Department, University of California) and the late William Fair (Chief of urologic surgery and Chair of urologic oncology, Memorial Sloan-Kettering Cancer Center, New York) showed that the progression of early-stage prostate cancer may be slowed, stopped, or perhaps even reversed by making similar changes in diet and lifestyle. This may be the first randomised controlled trial showing that the progression of *any* cancer may be modified just by changing what we eat and how we live. As we'll see later in this series of features, what's true for prostate cancer may also be true for breast cancer.

However it's important to substantiate and validate whatever health promises are made. In 2000, Dean Ornish was appointed to the White House Commission on Complementary and Alternative Medicine Policy. In the US, more money is spent out-of-pocket for alternative medicine than for traditional medicine, because many people have become disenchanted with conventional medicine. However, Ornish believes that many of these alternative medicines do not have robust scientific evidence to support their claims. Seen from this perspective, *his programme is one of the most scientifically documented alternative medicine approaches to health and healing*.

Beginning in 1977, Ornish's cardiac studies found that with diet and lifestyle modifications, patients experienced a 91% angina frequency reduction after only a few weeks, and most of them became pain-free. These were patients with very severe coronary heart disease, many of whom could not walk across the street without getting severe chest pain and shortness of breath, when they were enrolled. After one year, there was a 40% average reduction in LDL cholesterol levels, comparable to what is achievable with statin drugs like atorvastatin, without the costs or side-effects (both known and unknown).

In the Lifestyle Heart Trial, after only one year, there was significant reversal in coronary artery blockages in the group that went through Ornish's programme, whereas those in the randomised control group showed a worsening of their coronary artery blockages. Most patients continued to follow the programme for 5 years



Figure 1. Changes in Quantitative Coronary Arteriography

even though they had initially volunteered only for a one year study. It was found out that there was even more reversal in coronary artery blockages after five years than after one year, whereas randomised control patients showed even more worsening. These differences were highly statistically significant (Figure 1).

Figure 2 depicts what reversing heart disease looks like in a typical patient. This subject entered Ornish's study in



Figure 2. Top section represents comparative angiograms whilst lower section shows cardiac PET scans



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1986 at age 64 with severe atherosclerosis involving all his major coronary arteries and had been advised to undergo coronary bypass surgery due to severe angina. When he entered the study, he was unable to walk more than a few steps without severe chest pain. After 6 weeks, he was pain-free and was no longer advised to undergo bypass surgery. By the end of the first year, during which he lost 30 pounds due to diet and lifestyle changes, he was able to climb 130 floors per day on a StairMaster® with no angina. His cardiac PET scan revealed a 300% improvement in myocardial blood flow, and his angiogram showed reversal of coronary atherosclerosis. The angiogram illustrated in the upper left hand corner of figure 2 showing significant artery narrowing is significantly wider (upper right hand corner) after one year. The patient's cardiac PET scans at the bottom also show substantially improved myocardial blood flow, represented by brighter areas in the lower right hand picture.

Ornish's programme stopped or reversed heart disease progression in 99% of patients, besides 2½ times fewer cardiac events (heart attacks, bypass surgery, angioplasties and hospital admissions). He found a direct correlation between the amount of dietary and lifestyle changes and the amount of changes in coronary artery disease after both one and after five years (Figure 3). In other words, *the more people changed, the better they got.* \leq

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Figure 3. Adherence and change in Coronary Atherosclerosis after five years

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