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Letter to friends re: ticker

I could not bear to repeat this part of the letter the number of times required in order to notify all those I have elected to inform. So please understand the seeming impersonal delivery of the facts attendant to this description. Please forgive the lengthy profusion as well.

Recently I have been diagnosed as having a aortic valvular stenosis, bordering on the critical end of the spectrum. While it has been known for the last two and one half years, coincident with tests performed to evaluate a heart arrhythmia, that a 'mild aortic valve stenosis' has existed, this has been based upon the sound of the heart, coupled with performance upon a treadmill, and the imaging of an echocardiography device. Other peculiarities of the heart observed through imaging and through listening were noted at the same time. I was pronounced sound, and able to 'work in the woods'. A subsequent treadmill one year later seemed to show little change, although in hindsight a 'slurring' of the electrocardiogram trace was observed. However at that time once again I was pronounced sound and able to 'work in the woods'. In fact it was jokingly mentioned I had broken the treadmill (having done so well). I did indeed work in the woods as most of you know. I missed an originally scheduled treadmill at the yearly follow-up time (owing to a rather bad sprain to a leg that would have made for a poor treadmill performance. By the time this healed, other schedulings, and insurance deductibles, conspired to put off the next testing for another five to six months).

The most recent tests having taken place during January of this year, have revealed some distinct change, coupled with what I have thought to be a tightness in the middle of the chest during aerobic type exercise; and experienced during the treadmill test. The test was conducted in a manner different than previous ones (whether intentionally, inadvertently, or as a result of something that happens 'under new management' and is normally expected with changing technicians); the results were also different. These tests revealed a more pronounced 'slurring' (or depression of the baseline at a particular place) of the electrocardiogram trace. This warranted what is called a 'stress echocardiogram', another 'non-invasive' test designed to look at the heart before and immediately after stress with an imaging device; it also involved repeating the treadmill as the stress producing device.

The treadmill results were the same accompanied (as before) by a tightness in the middle of the chest (breastbone). The imaging portion revealed some physical changes (measurements of the heart) when compared to the previous echocardiogram. However, because the cardiologist's stethoscopic listening (sounding) of the affected valve did not seem to accord what was observed; he reported mostly upon the marked change in the aortic valve (particularly noting the change in pressures on each side of the valve), but without noting any particular alarm. He wished to see me again in six months. However, he was disturbed by the chest

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tightness and the depressed portion of the electrocardiogram trace, thinking perhaps coronary arteries were not providing sufficient blood (ischemia) to the heart under stress. He suggested yet another test to rule out this possibility.

The new test was performed: An angiogram (an 'invasive' imaging technique using an x-rayable dye injected into the heart, and/or vessels through a catheter conducted into the heart or an artery through the blood vessels accessed in the groin area). This would look at the aortic valve, and the coronary arteries. This imaging revealed a calcified bicuspid aortic valve with a very constricted opening. For the most part the arteries did not show signs of coronary artery disease, with differing interpretations of the apparent size of the left coronary artery, one noting it as small, another as normal. The angiogram tended to rule out insufficient blood supply from diseased coronary arteries as the cause of the chest tightness, and the aberrant cardiogram trace.

The cardiologist theorized that the 'congenitally' affected aortic valve was affecting the heart in the manner of causing an atypical contraction in order to deliver the volume of blood (through the restricted aortic valve opening) necessary to maintain the body under stress (theorizing its pumping action became affected and less efficient). It follows, the coronary arteries would be as less efficiently supplied with blood as any other part of the body under stress. Ordinarily one might predict other symptoms than those present, such as dizziness, shortness of breath and angina (the later of which may have been manifested as chest tightness [in my case?]).

Other factors have entered into the picture for which there are no useful theories, nor for which are there any known treatments. Cardiomyopathy is a catchall term used by the cardiologist that describes degeneration, or heart deterioration, apparent heart changes, or heart disease, with no known attribution or cure. This is of course the worst case.

Surgery then, is advised as the only hopeful prospect; to replace the aortic valve with an artificial one (St. Jude), or with a pig heart valve. Without surgery the scarred congenitally affected valve is predicted to bring about my demise in a period approximating three years. That was the final first opinion of the cardiologist. A second local opinion was rendered when viewed by a heart surgeon, paraphrasing his gut reaction (considered opinion) "that's got to come out of there".

I have talked briefly with the surgeon who tells of his success rate (which means doing the surgery and surviving the post operative time). He claims they do 700 hundred open-heart surgeries a year at Eugene's Oregon Heart Center. He is a valve-replacement specialist. He claims his losses are one in a hundred, and his complication rate is four in a hundred (stroke, god knows what else [I have yet to talk to him in detail which I am scheduled to do on the 18th of Feb.]). It is recommended that surgery take place soon, before I suffer some incident that will cause some

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other kind of heart damage (that might be prevented by acting soon). Obviously I have been advised to discontinue my logging activities until the surgery has been effected. The optimistic view, barring immediate complications (during and as result of the procedure) and the subsequent unforeseen ones, I should be able to resume a good deal of my normal physical activity within three months, and regain most of my strength after six months. We have not discussed the pessimistic view.

With an artificial valve, I would be required to consistently ingest an anti-coagulant in perpetuity, requiring careful periodic monitoring (once every two weeks to once a month) blood tests to determine its proper balance (pro-thrombin [clotting] time); and would need to observe a careful and consistent diet. AND to avoid physical trauma to the corpus that might result in uncontrollable bleeding.

The surgeon has recommended against a pig-heart valve, feeling I would outlive the valve, requiring its replacement (or whatever), since its longevity lies in the neighborhood of ten years. He would anticipate my general health should otherwise keep me apace with the average longevity for males in the US, that exceeding the predicted life-span of the pig valve. One supposes its advantage does not require an anticoagulant. However we have not discussed many of the details; perhaps one needs take anti-rejection drugs instead.

Most of this last is optimistic conjecture on my part; more discussion with the surgeon ( or whomever) with regard to other observed heart deficiencies may alter the whole picture.

Obviously this whole revelation has come as a shock. We do not know what to anticipate in the way of aftershocks. Its like a roller coaster ride we seem unable to stop. The knock and knell of the inevitable.

We could seek out yet other second opinions from the likes of the Shumways, and whoever else, all of which would involve expenditure of time, would involve travel, perhaps more tests, and an unknown expenditure of funds. We may yet decide to do this, if I cannot lay to rest inadequate answers to certain questions that as yet plague me. These inadequate answers may be judged to sum up the whole limitation of the medical profession which I am rapidly discovering is a rather inexact (imprecise) 'science'. The fee schedule is the most exacting part of the profession, all other intentions aside.