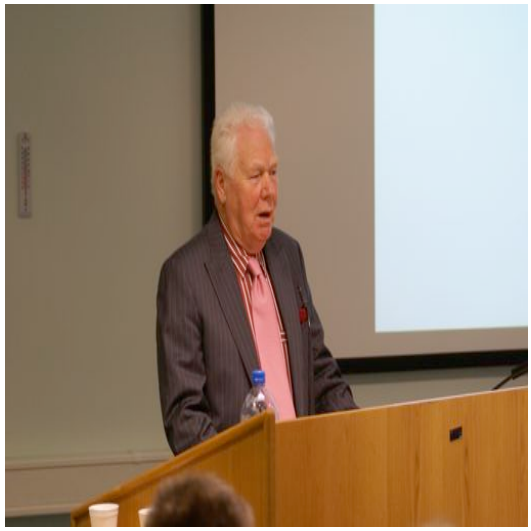
DEFIBBER NEWS

Supporting ICD Patients all over the North West



THIS ISSUE

Flu Vaccine May Protect Your Heart

CONTACT YOUR GP IF YOU HAVEN'T ALREADY HAD YOUR FLU JAB THIS YEAR

Get your shot now!!

(http://healthyliving.msn.com/diseases/cold-and-flu/flu-vaccine-may-protect-your-heart)

The shot doesn't just protect you against flu, it protects you from heart attacks," said Dr. Jacob Udell, a cardiologist at Women's College Hospital and the University of Toronto. In his research, Udell found that those who got a flu shot reduced their risk of heart attacks and other serious cardiovascular problems by nearly half during a one-year follow-up period.

He was scheduled to present his findings Sunday at the 2012 Canadian Cardiovascular Congress in Toronto. Udell and his team re-evaluated the results of four randomized trials that looked at how the influenza vaccine might help heart health. In all, the studies had more than 3,200 patients. The original studies were done from 1994 to 2008. Some of the people in the trials were free of heart disease, while others either had stable cardiovascular

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NEXT ICD GROUP MEETING
Wednesday 20th February 2013
2:00pm

Question and Answer Session with Dr Brown and Dr Williams

Education & Research Centre Wythenshawe

disease or had recently had heart attacks or other coronary problems. All groups were followed for median of a year. Those who got the flu vaccine had about a 50 percent reduction in heart attack, stroke or other major cardiovascular events.

During the follow-up, nearly 200 major cardiovascular events were reported, including 65 deaths related to cardiovascular issues. The research was not funded by vaccine developers. Udell said experts don't know for sure why the flu vaccine may be heart-protective, but offered two possible explanations. First, he said, the vaccine may protect vulnerable patients already in poor health from one more illness that could "dip them over the edge." Second, the protection may come from avoiding the inflammation associated with getting the flu, he said. Inflammation has long been linked to cardiovascular problems. Whichever way it might work, he said, "it certainly lends support to a lot of clinical guidelines that recommend the flu vaccine to patients either with heart disease or after a heart attack."

In another study presented at the meeting, researchers evaluated nearly 230 patients with irregular heartbeats who had been given implantable cardiac defibrillators. These devices give the body a shock or jolt to restore normal rhythms when needed. During flu season, those who have implantable cardiac defibrillators often report they get more shocks (and need medical attention) than other times of the year.

Cardiologists from Sunnybrook Health Sciences Centre in Toronto found that about 11 percent of those who got the flu vaccine got at least one shock from their defibrillator during flu season, but nearly 14 percent of those who did not receive the vaccine got a shock from their defibrillator.
The protective effect of the flu vaccine is not surprising to Dr. Len Horovitz, an attending physician at Lenox Hill Hospital in New York City and an internal medicine and lung specialist.
"Influenza is a big strain on the system," he said. That is especially true if someone has underlying disease, such as heart problems, diabetes, kidney disease or asthma. "Even a healthy person doesn't tolerate the flu that well," he said.

The new report about flu vaccine protecting the heart, Horovitz said, is "all the more reason to push for vaccination, as we always do."

This year, he said, he has noticed less pushback when he reminds patients to get their annual flu shot. Some of his patients are asking for the shot earlier this year.

A Heart Stopping Moment

Prior to my brush with death, I had numerous strange experiences. Frequently I would wake up in the night and be totally immobile. I could not move a muscle, I would try to move my legs and arms but they would not respond, eventually after a blind panic and much psychical effort I would be released. These attacks were completely at random. One night I decided to not fight this attack and I experienced the strange feeling of being inside my body but much smaller. This gave the feeling of protection, but also being trapped, then the body became part of me again, but changed my whole perception of what my psychical life was all about. In 2003, one day after lunch, I was walking back to my company vehicle, and my legs collapsed and I felt very weak and disorientated. Fortunately I was able to grab hold of the door handle of a nearby car, and steadied myself. After what seemed an age, I made my way to the van I was driving. Inside the van I always carried some dry towels. Using these towels I was able to wipe my very hot face, which inexplicably had become bathed in sweat, as had the rest of my body. I collected my thoughts and decided that the best course of action was to go to my doctor's surgery, situated on the outskirts of Blackburn.

My journey seemed to take a very long time. I parked my vehicle in a space on the road directly opposite the surgery. As I looked across the road I was relieved to see a light inside the building. I made my way across the road, only to experience my legs giving way again just as I got to the crown of the road. I forced myself to keep walking to the surgery and spoke to a receptionist. She informed me that the doctor was on an emergency call, and I would need to wait till he got back. The nurse at the surgery was still on duty and she took my

continued

pulse and blood pressure. She then hooked me up to an E.C.G. machine but was not able to get a reading.

Eventually the doctor came back to the surgery, and arranged for a blue- light ambulance to take me to the local hospital. The ride to the hospital was traumatic. A drip was inserted into my right arm, by a member of the ambulance personnel, who were very supportive. I felt in good hands. We arrived at the hospital in Blackburn. I was put into a wheelchair and taken into the hospital and into a side ward, which turned out to be the high dependency unit (HDU). The room looked like it hadn't been occupied for quite some time. I was told to undress, and get into bed. Some nightclothes were provided. Eventually I was visited by a couple of doctors and nursing staff. Monitors were then attached to my body, and I was told that my heart-rate was 263 beats a minute but not to worry as the nursing staff would do everything to get me well again. After more visits from various nurses, I had a visit from the hospital doctors and interns; quite a large number of them, maybe they expected me to explode My wife Doreen arrived, she was obviously very worried. The nurse had warned her that I could be in a critical condition.

Later, a member of the nursing staff visited my room, and I was told that the doctors had decided to take me down to the operating theatre. As we entered the theatre, a nurse said she would have to shave my chest as they were going to give me an electrical shock, to stop my heart, and then resuscitate me. Suddenly, she exclaimed that my heart rate had returned to normal rhythm. Feeling very relieved, I laughed and said a silent prayer. I felt quite euphoric, that my heart was back into its normal rhythm. After, when I returned to the HDU, my brother Stuart and his wife Irene arrived from Childer Thornton, in Cheshire. When all the drama had died down, we discussed what had happened to me, and they were very concerned that I had driven so far, to my doctor's surgery whilst in a state of shock. After various tests and a number of tablets, I was left in peace and slept very comfortably.

I spent a couple of days in the HDU before being transferred to a cardiology ward in the new hospital, which I shared with six other people. As time went on, I felt increasingly confident that I would soon be on my way home. The ward sister was very sympathetic and promised that I would be discharged as soon as possible. The following day I was told that I would be allowed to go home, but that I would need to see a heart specialist. An appointment was arranged, and I went to see a doctor Bennet at Wythenshawe Hospital in Manchester. He told me that I was suffering from Tachycardia, a form of Arrhythmia. This develops into an uneven heartbeat, which if not corrected can have fatal consequences. Dr Bennet stressed that a defibrillator would be like a lifebelt, and would give me a better chance of survival if I had another attack. After discussing the information with my wife, I agreed to have the operation. I was told that the defibrillator would regulate my heartbeat and monitor any abnormalities. This would be inserted under the skin of my chest wall.

Seven months later I was in a ward at the cardiology unit, waiting my turn to go down to the operating theatre. The procedure was performed very quickly and four other people in my ward were dealt with on the same day. We all lay on our beds, and when evening came we were expecting to get the offer of some food. We waited and waited, but no sign of any food. After speaking to various hospital staff, we were informed that the catering staff for our ward had gone off duty. This information brought forth howls of indignation, and when a doctor appeared on the ward, we were all quite vociferous in making our grievances heard.

After the doctor left, a nurse appeared, and said that the only thing she could get was a big bowl of chips and some bread. We congratulated her warmly and agreed that this would soften the blow of a lack of sustenance. Apart from this hiccup, my stay on the ward was very comfortable.

John Smart

It's all in the mind

I had my Defibrillator implanted in June 2006, having been delayed as I was attending the World Cup in Germany.

After implantation, it went off when I was cleaning my teeth on the Ward whilst preparing to go home after having had the ICD put in. That same evening, it went off again whilst I was bathing and shot me down the bath like a torpedo. Oh dear, I do not like this. I did of course report it resulting in a change of my medication.

I live in Timperley. This is an ideal location for gentle walks, which I was advised to take. My perambulations took me around the quiet roads, off Woodlands and Parkway road**. 'Bang'** at the second lamppost on Westvale Road**. 'Bang'** at the third lamppost on Northvale Road. 'Bang' at the corner of Wellington Road.

I thought, well I have to get home and as I continued towards the roundabout at Woodlands Parkway, **'Bang'**. I staggered in, reported it to the hospital and went in for more tests and medication checks.

Since then, everything has been fine, except for the battery changing. However, I knew from talking to people that these episodes do have a physiological effect. For example, I vowed never to walk up those roads again, clean my teeth or a bath that I couldn't forgo!

After 5 years, I am glad to say that the occupants of the named roads can now have the pleasure of seeing me as I thought that my reactions to the shocks were ridiculous. The purpose of me sharing this story with you all is that in discussion with other patients, I found that they had similar reactions. One even told me that he no longer goes to Tesco because his ICD had gone off there!

Take my advice and exorcise your demons. Don't be frightened. You know that you are in good hands with your ICD.

JEANETTE'S CORNER

A Very Happy, Healthy and Peaceful New Year to you all! On a personal note I do hope it is better than 2012. As a number of you will be aware I was off work for quite a few weeks over the year, I lost my Dad, had surgery on my foot, [it is improving slowly!] and lost my brother-in-law. On the work front, I unfortunately have been informed that I am no longer needed in Dr Davidson's clinic on Monday mornings. This has been a huge change for me as I have been part of that clinic for 10 years. However I just want to reassure you all that I am still here for you. If you need any advice, have concerns over your device, wound, clinic appointments, anything then just ring or email me, if I do not have the answer I will find someone who does! Dr Fox and Dr Brown's patients will know I have not been in there clinic for sometime but I am still your specialist nurse and here to help and/or support you.

Now I have an apology to make, I am aware that a number of you received your last Newsletter after the support group meeting, I am so sorry about that, unfortunately as I was off sick things went slightly awry! But we are back on track and hopefully you will receive this years 3 editions on time. Of course it would be good if you could all write a little something for the Newsletter to share with your fellow patients and make George's job so much easier!

Finally for now, Laurence the Chairman of the ICD Support Group has retired as the Chair, unfortunately for him, he is still on the committee. Laurence has worked tirelessly for the group for a number of years, and those of you who do attend the meetings will know what a comedian he is too!!! Joking apart, on your behalf and from Susan, Lindsay and myself we THANK YOU Laurence from the bottom of our hearts for your dedication and hard work in maintaining such a great support group! I hope too see a good crowd at the meeting in February as it is the Question and Answer session with Dr's Williams and Brown.

Take care all, you know where we are

Jeanette

Researchers have successfully created a human heart cell model of arrhythmogenic right ventricular cardiomyopathy (ARVC), an inherited heart muscle disorder that puts carriers at high risk of developing life-threatening arrhythmias and sudden cardiac death.

Genetic mutations in ARVC typically affect the function of desmosomes, which are structures that attach heart muscle cells to one another. Desmosomes provide strength to the heart muscle and play a signalling role between neighbouring cells. Without normal desmosomes, the heart muscle cells will detach from one another and die, particularly when the heart muscle is placed under stress (such as during vigorous exercise). The damaged heart muscle is gradually replaced by fat and scar tissue. These changes also disrupt the electrical signals that control the heartbeat, which can lead to dangerous arrhythmia and sudden cardiac death.

The team discovered that key characteristics of the disease, such as abnormal "fatty changes" and altered distribution of proteins involved in cell-cell connections (called desmosomal proteins) are reproduced in the heart cells. This new cellular model for studying the disease could help to improve understanding on how these mutations lead to arrhythmias and clinical manifestations of ARVC.

The human heart cell model was developed using patient-specific induced pluripotent stem cells, converting skin samples from an ARVC patient into heart muscle cells on a petri dish outside the body. This technique is based on the induced pluripotent stem cells (iPSC) technology of transforming skin cells into stem cells developed by Professor Shinya Yamanaka, winner of the 2012 Nobel Prize in Physiology/Medicine - bypassing the ethical concerns (and political hype) of human embryonic stem cells. They developed a key clinical application for iPSC technology by replicating patients' own heart cells outside the body for the study of genetic cardiovascular diseases. Heart cells from patients with inherited heart muscle disease can now be studied in a petri dish without risk to patients, including the possibility of testing new treatments.

ARVC occurs in an estimated 1 in 2,000 to 1 in 5,000 people. The disorder may be under-diagnosed as it can be difficult to detect in people with mild or no symptoms. ARVC is a rare condition, more commonly detected in younger individuals, in their 20s and 30s, particularly males, and is more lethal in that age group. Common symptoms if they do occur include palpitations, light-headedness and fainting. Those with family history of sudden cardiac death are at higher risk.

Associate Professor Philip Wong, Director, Research and Development Unit, National Heart Centre Singapore (NHCS) said, "For the first time, we have created a 'crystal ball' of the disease outside the body, to look into the patient's detailed genetic makeup and its relationship to the manifestation of disease. There would be significant opportunities now to safely study the effects of environmental factors and treatments, including gene and drug therapy, on such diseases as they do not have to be tested on patients in the first instance."

The team has also been successful in using the iPSC technology to replicate other inherited heart rhythm diseases such as long QT syndrome (LQTS) and Brugada Syndrome. These diseases are caused by mutations in genes coding for proteins that control the electrical activity of the heart, which can lead to ventricular arrhythmias, blackouts and sudden cardiac death.

MORE INFORMATION ON STEM CELLS AND THE HEART RELATING TO ARVC; LONG QT and BRUGADA SUNDROME

"Our success in using iPSCs as a platform for the study of genetic cardiovascular diseases was made possible with the clear and cohesive networking between the research scientists, clinicians and bio-medical engineers. The collaborative efforts with other leading research institutions in Singapore, including Duke-NUS, NUS and A*STAR, has allowed NHCS to take a lead globally in this area and enhance Singapore's reputation as a leader in translational cardiovascular research," said Wong. "The next stage is for us to use this ARVC model to understand more about the disease and to specifically use such models to risk stratify patients with risk of cardiac arrhythmias. Such models will allow us to measure risk in individuals safely and tailor individual preventive programmes and treatments to patients in a more precise manner, i.e. the practice of 'stratified and personalised' medicine."

EUROPEAN HEART JOURNAL – OCT 25TH 2012