## FIGHTING A FAMILY CURSE: INHERITED SUDDEN DEATH SYNDROME Professor Hugh Watkins, Department of Cardiovascular Medicine, John Radcliffe Hospital, Oxford

The last meeting continued the theme of the Heart and was linked to the current" Tree of Life "exhibition at the Corinium Museum. The lecture by Professor Hugh Watkins of the Department of Cardiovascular Medicine at the John Radcliffe Hospital ,Oxford. was on" Fighting a Family Curse--- Inherited Sudden Death Syndrome" He began by dividing disease into two main categories – those of a genetic causation and those where the environment plays a large part in causation.

The condition was first documented after an autopsy on a young adult male with no apparent clinical reasons for death. The examination by Dr Donald Tear at St Georges Hospital in 1958 showed an asymmetrical heart with thickening of the heart ventricular muscle. He traced the man's family tree and found that similar deaths had

occurred.

The condition occurs in young adults not experiencing any symptoms with a frequency of 1 in 500. It can occur in fit athletes after severe exercise e.g. international footballers.

The family trees of patients having the condition have been mapped and often there are 4-5 generations involved in a variety of countries. Further investigation has shown there is a DNA variation in sufferers with a single gene being involved.

Also the condition is related to the motor function of the heart.

As a result of screening of live individuals in the relevant age group ,in specific families, some 10 % have been found to be at risk of developing the condition. What can be done to help? In those at risk, the condition results from energy imbalance of the heart and the use of beta blockers is proving to be helpful. Finally Professor Watkins said that his research has generated a number of different problems e.g. clinical, ethical and economic.

Lecture on 8th November 2006 at the Royal Agricultural College

## FIGHTING A FAMILY CURSE - INHERITATED SUDDEN SYNDROME

## Professor Hugh Watkins Department of Cardiovascular Medicine, John Radcliffe Hospital, Oxford

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*Given on Wednesday* 8<sup>th</sup> *November* 2006 *at the Royal Agricultural College, Cirencester*