

Cardiovascular: The CVD Sibling Risk Factor

Recent research has shown that if your brother or sister is unfortunate enough to suffer from cardiovascular disease (CVD), then your own chances of developing heart problems are dramatically increased.

In a paper published in the Journal of the American Medical Association, the Framingham Heart Study team found that middle-aged adults who have a sibling with CVD have a 45% increased risk of developing the same condition – the risk being even higher than that associated with parents who suffered from CVD. Parental CVD is known to double the risk in offspring.

The Framingham Heart Study (a prospective population-based cohort study) was begun in 1948, with the Framingham Offspring Study (an inception cohort study of the Framingham Heart Study) beginning in 1971. The participants in the sibling study were taken from the offspring cohort. They were aged 30 years or older, free of CVD and had at least one sibling in the study. They were followed up for a period of 8 years. Data from over 5000 people was examined in the present study. During the 8 year follow up period 329 CVD events occurred. Baseline risk factors were more prevalent in the sibling CVD group compared with the no sibling CVD group and sibling CVD

was found to confer an increased risk of future CVD events above and beyond established risk factors and parental CVD in middle-aged adults.

These results, of course, raise the question as to why having a sibling with CVD should increase your risk of developing CVD so dramatically. The researchers consider that a shared early environment, during which life-long poor eating and exercise habits develop, maybe a factor. The study would seem to underline the evidence that whilst genes undoubtedly play a part, the interaction between our genes and our lifestyle choices is possibly more influential than our genes alone. And at least lifestyle is something that all of us have the ability to change.

References:-

Joanne M. Murabito, MD, ScM; Michael J. Pencina, PhD; Byung-Ho Nam, PhD; Ralph B. D'Agostino, Sr, PhD; Thomas J. Wang, MD; Donald Lloyd-Jones, MD, ScM; Peter W. F. Wilson, MD; Christopher J. O'Donnell, MD, MPH Sibling Cardiovascular Disease as a Risk Factor for Cardiovascular Disease in Middle-aged Adults JAMA Vol.294 No.24, December 28, 2005