News Release

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New use for old drug in heart disease prevention

Paracetamol may provide more than just pain relief to those at risk of developing heart disease, according to a new study led by Professor Michael Davies from the ARC Centre of Excellence for Free Radical Chemistry and Biotechnology at the Heart Research Institute and The University of Sydney.

Professor Davies together with colleagues from the Heart Research Institute, St Vincent's Hospital Sydney and the University of NSW, has been researching paracetamol as a preventive for heart disease and other diseases associated with free radicals, such as rheumatoid arthritis and some cancers.

"Essentially we have been investigating a new use for an old drug as an early preventative, and the results have been very promising", says Professor Davies.

The teams have found paracetamol is able to prevent an enzyme called myeloperoxidase from producing hypochlorous acid, a highly reactive chemical that can damage tissues when produced in the wrong place, at the wrong time or at excessive levels. Myeloperoxidase and hypochlorous acid levels are often used in patients as predictors of future heart disease.

The group made the discovery in model cell culture systems using paracetamol doses in the range currently prescribed for pain relief, and are now moving into human plasma studies with confidence that they will observe similar positive results.

"To prevent the onset or progression of disease, the idea would be for doctors to prescribe paracetamol to patients who are in high risk categories, display early signs of developing, or have high myeloperoxidase levels", says Professor Davies.

However the researchers warn people not to attempt self-medicating, as to obtain the desired benefits patients would need to adhere to a properly tested medication programme.

"This is an affordable, available pharmaceutical with few side-effects at normal doses that has enormous potential benefit to those at risk of developing heart disease," says Professor Davies. "In short, it's ideal."

The work will be published in the upcoming edition of Biochemical Pharmacology.

For more information:

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