

M Irie et al. Int. Arch Occup. Environ Health Mar (2001) Vol. 74(2) p 153.

Links between stress and cancer have previously been discussed in the context of depression of immune function.

This study was designed to investigate a possible association between work-related factors, including psychological stress, and the formation of a type of oxidative DNA damage, 8-hydroxydeoxyguanosine (8-OH-dG). Such damage could be associated with initiation.

A total of 54 healthy non-smoking and non-drinking workers (27 male and 27 female, aged 41.2 +/- 12.5 years) in a single company took part.

8-OH-dG levels in the peripheral blood leukocytes were established coincident with a questionnaire survey for workload, fatigue, sleep, psychological stress and the prospect of alleviating it.

The levels of 8-OH-dG in female subjects were related to perceived workload ($P = 0.010$), perceived psychological stress ($P = 0.007$), and the perceived impossibility of alleviating stress ($P = 0.048$).

No such associations were observed in male subjects.

Comment

Causal direction?

Strength of association between 8-OH-dG in leukocytes and risk of cancer is not known.

