

GLUCOSE-6-PHOSPHATE DEHYDROGENASE POLYMORPHISM AND LYMPHOMA RISK

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Aims and background: Evidence linking the glucose-6-phosphate dehydrogenase (G6PD) polymorphism and risk of non-Hodgkin's lymphoma is conflicting. Risk of non-Hodgkin's lymphoma was increased in subjects expressing the G6PD deficient phenotype, whereas subjects under medication with statins, a lipid-lowering class of drugs partially mimicking G6PD deficiency, seemed to enjoy a protective effect.

Methods: We conducted a case-control study on lymphoma risk associated with the self-reported G6PD deficient phenotype in 122 lymphoma male cases and 116 male controls in Sardinia,

Italy. The association with the GdMed+ genotype, the most frequent variant expressing a deficient enzyme activity, was also tested in 49 male lymphoma cases and 31 controls. The WHO classification was used to identify lymphoma subentities.

Results: Neither self-reported G6PD deficient phenotype nor the GdMed+ genotype showed an association with lymphoma risk or its subentities.

Conclusions: Our results do not confirm an association either positive or negative between the G6PD polymorphism and lymphoma risk.

Key words: epidemiology, glucose-6-phosphate dehydrogenase, non-Hodgkin's lymphoma.

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