VITILIGO MAY PROTECT SKIN

A recently published research paper **"Variant of *TYR* and Autoimmunity Susceptibility Loci in Generalized Vitiligo"** by among others Professor Richard Spritz, Professor Dorothy Bennett and Professor David Gawkrodger could have identified that vitiligo may give natural protection against deadly skin cancer.

Researchers have now discovered a common gene mutation that both increases the chances of vitiligo and reduces the risk of malignant melanoma, the most serious form of skin cancer.

Professor Dot Bennett, from St George's, University of London, one of the study authors, said: "Although this may provide some consolation for people with vitiligo, they should still be careful in the sun. As they know, they sunburn quickly, and a lower risk of cancer doesn't mean zero."

Seventy per cent of the general population have the gene variant that increases the risk of vitiligo while reducing the risk of melanoma. The remaining 30% have a different variant that raises melanoma risk while lessening the chances of vitiligo. Although everyone has one of the two variants, neither guarantees that either vitiligo or melanoma will actually develop. Likewise, neither guarantees protection.

The findings emerged from a genetic study of 1,514 patients with vitiligo and 2,813 people without the disorder. Researchers looked at almost 580,000 single-letter changes in the genetic code called single nucleotide polymorphisms (SNPs) to see if any were associated with vitiligo. The findings, published in the New England Journal of Medicine, underline the growing belief that vitiligo is an auto-immune disease.

The scientists linked seven genes to vitiligo that were already associated with auto-immune conditions such as type-1 diabetes, rheumatoid arthritis and lupus.

Prof Bennett said: "As nine out of 10 of the genes newly found to be associated with vitiligo are connected with the immune system, it really begins to be impossible not to believe that immunity is important in this disorder. "This gives new support to an old idea that our immune system may help us not to get cancer, by killing potential cancer cells before they get started.

"This also underlines the idea that successful treatment is likely to include an element of calming down the immune response."

Malignant melanoma affects more than 8,900 people in the UK each year and is the country's sixth most common cancer whilst Vitiligo affects approximately 1 in 100 worldwide, approximately 600,000 in the UK..

Ed from Prof Dorothy Bennett's press release/JJV 22/04/10