Gray Hair And Vitiligo Reversed At The Root

New research in The FASEB Journal suggests that loss of skin or hair color can be corrected by a new compound -- a pseudocatalase -- that reverses oxidative stress

Bethesda, MD (prHWY.com) May 6, 2013 - Bethesda, MD--Hair dye manufacturers are on notice: The cure for gray hair is coming. That's right, the need to cover up one of the classic signs of aging with chemical pigments will be a thing of the past thanks to a team of European researchers. In a new research report published online in The FASEB Journal (http://www.fasebj.org) people who are going gray develop massive oxidative stress via accumulation of hydrogen peroxide in the hair follicle, which causes our hair to bleach itself from the inside out, and most importantly, the report shows that this massive accumulation of hydrogen peroxide can be remedied with a proprietary treatment developed by the researchers described as a topical, UVB-activated compound called PC-KUS (a modified pseudocatalase). What's more, the study also shows that the same treatment works for the skin condition, vitiligo.

"To date, it is beyond any doubt that the sudden loss of the inherited skin and localized hair color can affect those individuals in many fundamental ways," said Karin U. Schallreuter, M.D., study author from the Institute for Pigmentary Disorders in association with E.M. Arndt University of Greifswald, Germany and the Centre for Skin Sciences, School of Life Sciences at the University of Bradford, United Kingdom. "The improvement of quality of life after total and even partial successful repigmentation has been documented."

To achieve this breakthrough, Schallreuter and colleagues analyzed an international group of 2,411 patients with vitiligo. Of that group, 57 or 2.4 percent were diagnosed with strictly segmental vitiligo (SSV), and 76 or 3.2 percent were diagnosed with mixed vitiligo, which is SSV plus non-segmental vitiligo (NSV). They found that for the first time, patients who have SSV within a certain nerval distribution involving skin and eyelashes show the same oxidative stress as observed in the much more frequent general NSV, which is associated with decreased antioxidant capacities including catalase, thioredoxin reductase, and the repair mechanisms methionine sulfoxide reductases. These findings are based on basic science and clinical observations, which led to successful patient outcomes regarding repigmentation of skin and eyelashes.

"For generations, numerous remedies have been concocted to hide gray hair," said Gerald Weissmann, M.D., Editor-in-Chief of The FASEB Journal, "but now, for the first time, an actual treatment that gets to the root of the problem has been developed. While this is exciting news, what's even more exciting is that this also works for vitiligo. This condition, while technically cosmetic, can have serious socio-emotional effects of people. Developing an effective treatment for this condition has the potential to radically improve many people's lives."

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