INFLAMMATORY SKIN DISEASES (OTHER THAN ATOPIC DERMATITIS & PSORIASIS)

ASSOCIATION OF VITILIGO WITH METABOLIC SYNDROME: A CASE CONTROL STUDY

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BACKGROUND: Vitiligo is known to be associated with diabetes mellitus and insulin resistance. Vitiligo patients may have a preponderance to develop metabolic syndrome owing to the common autoimmune, proinflammatory and genetic factors.

METHODS: 35 vitiligo patients of age 20-50 years with >5% body surface area involvement and 30 age and sex matched healthy controls were recruited in the study. Body mass index(BMI), waist circumference and blood pressure were recorded for each of the subjects. Fasting plasma glucose, complete lipid profile and insulin levels were measured. These parameters were utilized for the assessment of presence of metabolic syndrome using International Diabetes Federation(IDF) criteria and Homeostasis model assessment(HOMA-IR) method for insulin resistance. Data was analysed for the association of duration, extent, severity and activity of vitiligo with metabolic syndrome.

RESULTS: The association of vitiligo with metabolic syndrome was found to be highly significant compared to controls($p<0.001$). The waist circumference and BMI of cases(96.54±13.53cm,25.18±4.59kg/m2) were significantly higher than in controls(86.93±7.83cm,21.79±2.51kg/m2; $p<0.01$). Moreover, 40% of the vitiligo patients were hypertensives in contrast to only 3.3% of the controls. The serum triglycerides and insulin level were also notably raised in cases(141.8±57.1mg/dl,7.78±2.21µIU/l) in comparison to controls(111.13±34.56mg/dl,5.62±2.44µIU/l; $p<0.005$). No association was found between the duration, extent and activity of vitiligo with metabolic syndrome.

CONCLUSION: It is possible that patients with vitiligo are at a higher risk of developing metabolic syndrome and dyslipidemias. Larger, multicentric trials would be needed to further elucidate this association and hence, implement screening and treatment recommendations.