ABSTRACT:

Background:

Psoriasis is a chronic T-cell mediated inflammatory skin disease characterized by complex alterations in epidermal growth and differentiation together with multiple biochemical, vascular and immunological changes.

Objectives:

This study was carried out in psoriasis patients to estimate their level of insulin resistance and to study the other associated biochemical parameters like fasting plasma glucose, serum high density lipoproteins and serum triglycerides in psoriasis patients.

Materials and methods:

This cross-sectional study included 100 psoriasis patients and 100 age matched healthy controls attending outpatient department of Dermatology, Sree Mookambika Institute of Medical Sciences. Fasting blood samples were collected. FPG, insulin, HDL and triglycerides were assessed using Beckmann Coulter kit. IR was calculated using HOMA-IR adopting the value ≥2.5. Independent sample “t” tests were done for comparison of variables in two groups. Statistical analysis was done by SPSS 20.

Results:

IR was observed in the study group. FPG and fasting insulin levels were significantly high in the cases compared to the controls. Triglyceride levels were significantly higher and HDL was significantly lower in psoriasis patients.

Conclusion:

The results reveal IR was seen in psoriasis patients when compared to the controls. There was also a strong association of biochemical parameters like hyperinsulinemia, hyperglycemia, high triglycerides and low HDL levels in the study group. This may elevate the risk of atherosclerosis, particularly cardiovascular diseases. Therefore periodic screening of psoriatic patients is recommended which may help in appropriate management.

Key words:

Psoriasis, Insulin, Insulin Resistance, Hyperinsulinemia, Hyperglycemia, HOMA-IR.