

ACNE, ROSACEA, AND RELATED DISORDERS (INCLUDING HIDRADENITIS SUPPURATIVA)

## SUBCLINICAL ATHEROSCLEROSIS IN PATIENTS WITH MODERATE AND SEVERE HIDRADENITIS SUPPURATIVA

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**Introduction:** Hidradenitis suppurativa is a chronic inflammatory disease presenting with recurrent abscesses, nodules and scars in intertriginous areas. Chronic systemic inflammation is shown to be associated with an accelerated atherosclerotic process.

**Objective:** We aimed to evaluate whether moderate and severe hidradenitis suppurativa (HS) is associated with subclinical atherosclerosis using carotid intima thickness (CIMT) with recognized clinical and biochemical parameters.

**Materials and Methods:** We prospectively evaluated 30 moderate and severe HS patients (Hurley stage II and III exclusively) and age/sex-matched 30 healthy controls (HC). Patients with malignancies, diabetes mellitus, chronic kidney disease or any other known systemic inflammatory disorder and HS patients under biologic therapy were excluded from the study. CIMT of the HS patients and HC was measured using B-mode ultrasound. Independent-samples T-test or Man-Whitney-U test were used to compare CIMT and the traditional cardiovascular risk factors of two groups, where appropriate. A multiple linear regression model was used to identify clinical and biochemical parameters that associated with increased CIMT in HS patients.

**Results:** CIMT values of the HS patients (R-CIMT= 0.58±0.24, L-CIMT=0.61±0.31) exceeded those of HC (R-CIMT 0.46±0.10, L-CIMT=0.46±0.11) (P=0.011 and P=0.017, respectively). Amongst other biochemical and clinical parameters, only blood glucose levels (HS=88.73±9.61 mg/dL vs. HC= 76.30±11.14 mg/dL, P<0.0001), body mass index (HS= 28.25±4.76 kg/m<sup>2</sup> vs. HC=24.97±4.81 kg/m<sup>2</sup>, P=0.01), and waist circumference (HS=95.43±14.1 cm vs. HC= 85.30±14.6 cm, P=0.008) differed among HS patients and HC. In the multivariable linear regression model adjusted for age, sex, and traditional cardiovascular risk factors, only the duration of the disease was significantly associated with increased CIMT (r=0.56, P=0.012).

**Conclusions:** We demonstrated the presence of subclinical atherosclerosis in moderate and



severe HS by showing increased CIMT values; hence, we highlight that new treatment strategies addressing the increased cardiovascular risk in HS should be considered.

