Patients with Diabetes Experience Greater Pruritus Burden with Impact on QOL

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Introduction: The global prevalence of diabetes is expected to continue its rapid trend from 2021 to 2050, with an estimated prevalence of 21% to 33% in the United States by 2050. Patients with diabetes are believed to experience more itch. However, the evidence supporting this assumption is limited.

Aims: The aim of this study was to utilize a dataset capture using an automated patient questionnaire which captured both a medical history of diabetes and ItchyQuant Tool to assess whether patients with diabetes experience additional itch burden. This was a secondary data analysis using data from a pre-visit survey completed by patients who visited a dermatology clinic between March 2021 and October 2022. A total of 6,144 patients with 10,865 encounters (526 patients with self-reported diabetes and 5,618 patients without) who had completed data were included in this analysis. The disease burden was measured by ItchyQuant and SkindexMini which captures symptom (0-6), emotional (0-6), and functional burdens (0-6). Descriptive statistics and ordered logit models were used for analysis.

Results: Patients with diabetes on average had substantially higher itch scores than patients without diabetes (3.9 vs. 2.7; p<0.05). These differences persisted when adjusted for age, gender, and race. The differences in pruritus burden translated into marked differences in quality-of-life measurements as assessed by SkindexMini measurements. Patients with diabetes had higher SkindexMini Symptom (3.2 vs.2.5; p<0.05), emotion (3.0 vs. 2.7; p<0.05), and function scores (2.5 vs. 2.0; p<0.05). These differences remain significant when adjusted for age, gender, and race.

Conclusion: To the best of our knowledge these data represent the largest dataset capture in routine practice measuring itch burden in patients with diabetes and support the previous impression that diabetes with higher itch disease burden.