LETTER TO THE EDITOR OPEN ACCESS

## Association Between Seborrhoeic Dermatitis and Hypertension: A Potential Clinical Correlation

Sir.

We are writing to bring attention to an important observation from our recent cross-sectional study, which investigated the potential association between seborrhoeic dermatitis (SD) and hypertension in a cohort of 155 patients at a tertiary care hospital in Pakistan. The findings revealed that 29% of the patients with SD had hypertension, with a particularly high prevalence of 51.1% among those aged 35 years or older.

SD, a chronic inflammatory skin condition predominantly affecting areas rich in sebaceous glands, has been widely studied for its pathophysiology, yet its systemic associations remain underexplored. Notably, our study builds on the limited existing evidence, such as the cross-sectional analysis by Linder et al., which reported a 27.1% prevalence of hypertension among SD patients within an Israeli population. This points towards a potential link between SD and cardiovascular risk factors, similar to those established in psoriasis, another chronic inflammatory dermatosis.

The significant association between SD and hypertension in older patients in our study underscores the need for further investigations. Chronic inflammation, a hallmark of SD, may contribute to the development of hypertension through mechanisms analogous to those observed in psoriasis, involving inflammatory cytokines such as IL-6, TNF- $\alpha$ , and IFN- $\gamma$ . The exact pathophysiological mechanisms linking SD to hypertension remain to be elucidated, but our findings suggest that SD might serve as a clinical marker for increased cardiovascular risk.

Given these findings, we advocate for routine blood pressure screening in patients with SD, particularly those over 35 years of age, to facilitate early identification and management of hypertension. This proactive approach could significantly reduce the risk of severe cardiovascular events in this patient population. However, we acknowledge that our study has limitations, including its cross-sectional design, which precludes the establishment of causality, and the focus on a specific population that may not be generalisable. Future research, particularly longitudinal and case-control studies, are needed to confirm these associations and explore the underlying mechanisms.

Our study highlights a noteworthy association between SD and hypertension, which warrants attention from clinicians and researchers alike. We hope this finding encourages further research into the systemic implications of SD and its potential role in cardiovascular risk assessment.

## COMPETING INTEREST:

The authors declared no conflict of interest.

## **AUTHORS' CONTRIBUTION:**

TA: Concept and design of the work.

ST, MZM: Analysis and interpretation of the data.

SS, MZM: Critical revision of the manuscript for important intellectual content.

All authors approved the final version of the manuscript to be published.

## REFERENCES

- Clark GW, Pope SM, Jaboori KA. Diagnosis and treatment of seborrheic dermatitis. Am Fam Physic 2015; 91(3): 185-90.
- Linder D, Dreiher J, Zampetti A, Sampogna F, Cohen AD. Seborrheic dermatitis and hypertension in adults: A cross-sectional study. J Eur Acad Dermatol Venereol 2014; 28(11):1450-5. doi: 10.1111/jdv.12310.
- Salihbegovic EM, Hadzigrahic N, Suljagic E, Kurtalic N, Sadic S, Zejcirovic A, et al. Psoriasis and high blood pressure. Med Arch 2015; 69(1):13-5. doi: 10.5455/ medarh.2015.69.13-5.
- Almas A, Godil SS, Lalani S, Samani ZA, Hameed Khan A. Good knowledge about hypertension is linked to better control of hypertension; a multicentre cross sectional study in Karachi, Pakistan. BMC Res Notes 2012; 5:579. doi: 10.1186/1756-0500-5-579.

Tazein Amber<sup>1</sup>, Saadia Tabassum<sup>1</sup>, Shiyam Sunder<sup>2</sup> and Muhammad Zain Mushtaq<sup>3</sup>

<sup>1</sup>Department of Dermatology, The Aga Khan University Hospital, Karachi, Pakistan

.....

<sup>2</sup>Department of Community Health Sciences, The Aga Khan University Hospital, Karachi, Pakistan

<sup>3</sup>Department of Internal Medicine, The Aga Khan University Hospital, Karachi, Pakistan

Correspondence to: Dr. Tazein Amber, Department of Dermatology, The Aga Khan University Hospital, Karachi, Pakistan

E-mail: tazein.amber@hotmail.com

Received: January 10, 2024; Revised: August 26, 2024;

Accepted: October 08, 2024

DOI: https://doi.org/10.29271/jcpsp.2024.12.1547

• • • • • • • • •