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**Letter to the Editor**

# Increased Pulse Rate in Insulin-Resistant Patients: A Clinical Observation

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Dear Editor,

As an internal medicine specialist with a dedicated interest in insulin resistance, I have been engaged in ongoing clinical studies investigating various aspects of this complex condition. During routine physical examinations in my practice, I have observed a consistent pattern whereby insulin-resistant patients exhibit higher pulse rates compared to their non-insulin-resistant counterparts. This observation is based solely on physical examination findings without the use of additional diagnostic tools.

Previous studies have demonstrated a clear link between insulin resistance and autonomic dysfunction, often manifested as increased sympathetic nervous system activity leading to elevated pulse rates. These findings underscore the cardiovascular implications of autonomic alterations in insulin-resistant populations [1,2].

Although pulse rates in insulin-resistant individuals often remain within the conventional range (60–100 bpm), even subtle increases have been linked to adverse cardiovascular outcomes in the general population. Studies have demonstrated that resting heart rates on the higher end of normal are independently associated with an increased risk of hypertension, coronary artery disease, and mortality [3,4]. Therefore, the slightly higher rates observed in this group may signal early cardiovascular vulnerability.

This finding may reflect heightened sympathetic activity or early autonomic imbalance-both commonly associated with insulin resistance. While the exact mechanisms remain unclear, such observations could be clinically valuable for early risk stratification and guiding preventive strategies.

My previous research, which is currently under peer review and focuses on masked hypertension in insulin-resistant patients, investigates different clinical aspects of this population. However, the increased pulse rate noted in this letter was also observed during routine physical examinations in that same patient group.

I hope this clinical observation encourages further research and discussion regarding the cardiovascular implications of insulin resistance and supports the integration of comprehensive clinical assessments in routine practice.

Sincerely,

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## Declarations

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## Conflict of interest declaration

None

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## Ethical Clearance

Not applicable

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