Hypoglycemia is not an uncommon encounter; however, untreated hypoglycemia may result in devastating events. Its clinical manifestations are non-specific, including altered mentation, lethargy, diaphoresis, and palpitation. Compared to tachycardia, sinus bradycardia is an uncommon presentation of hypoglycemia and is rarely reported.

### CASE PRESENTATION

**Demographic**
- 70-years-old female

**Past Medical History**
- Bicuspid aortic valve with aortic aneurysm post repair.
- History of eating disorders during college.

**Presentation**
- Fatigue and depressed for 4 months.
- Unintentional weight loss of 20 pounds in 2 months.
- Not on insulin or oral hypoglycemic agents.

**Examination**
- Vital signs normal except heart rate 46 bpm.
- Cardiopulmonary examination: normal.

### HOSPITAL COURSE

- Fingerstick glucose: 31mg/dL. Given 1 ampule of Dextrose 50%
- 30 minutes later: Glucose improved to 138mg/dL and HR improved to 80 bpm.
- Day 2: Recurrent hypoglycemia with glucose of 48mg/dL and symptomatic sinus bradycardia at 53 bpm.

### DISCUSSION

- In the light of this case, we illustrate the possibility of sinus bradycardia caused by hypoglycemia in a non-diabetic patient with eating disorders.
- The exact mechanism is not well established yet.
- Proposed pathophysiology include decreased catecholamine levels or down-regulation of cardiac adrenergic receptors.

### CONCLUSION

- Hypoglycemia-induced bradycardia could occur in non-diabetic patients, usually in the setting of eating disorders.
- Clinicians must be aware of this unusual hypoglycemia manifestation and manage it promptly to prevent life-threatening events.