## Meals on Variations of ST Segment Elevation in Patients with Brugada Syndrome

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Variations of ST elevation are frequently associated with meals. Aggravation of ST elevation is most prominent in the evening to night after dinner rather than the period between midnight and early morning. This information may help to predict event times at high risk for life-threatening arrhythmias in BrS. variations of ST elevation are frequently associated with meals. Aggravation of ST elevation is most prominent in the evening to night after dinner rather than the period between midnight and early morning. This information may help to predict event times at high risk for life-threatening ary help to predict event times at high risk for life-threatening ary help to predict event times at high risk for life-threatening arrhythmias in Brugada syndrome. (1)

In symptomatic patients with Brugada syndrome, bradycardia-dependent augmentation of ST elevation was enhanced for the postprandial period, especially after dinner. This could be related to occurrence of ventricular fibrillation in the late evening. (2)

ST segment elevation in patients with BrS was augmented by selective stimulation of muscarinic cholinergic receptors (3) For instance: nocturnal vagotony, vomiting (in patients with BrS, a J-point and ST-segment elevation was induced when the patient experienced nausea and vomiting(4). The phenomenon was originated from the vagal stimulation associated with the nausea and vomiting. And meals(5)

References

- 1. Nishizaki M, Sakurada H, Mizusawa Y, et al. Influence of Meals on Variations of ST Segment Elevation in Patients with Brugada Syndrome. J Cardiovasc Electrophysiol. 2008 Jan;19(1):62-68.
- 2. Mizumaki K, Fujiki A, Nishida K, et al.Postprandial augmentation of bradycardiadependent ST elevation in patients with Brugada syndrome.J Cardiovasc Electrophysiol. 2007 Aug;18(8):839-44.

- 3. Patruno N, Pontillo D, Anastasi R, et al. Brugada syndrome and neurally mediated susceptibility. Ital Heart J. 2005; 6:761-764.
- 4. Mizumaki K, Fujiki A, Tsuneda T, et al. Vagal Activity Modulates Spontaneous Augmentation of ST Elevation in the Daily Life of Patients with Brugada Syndrome. J Cardiovasc Electrophysiol. 2004; 15:667-673
- 5. Arai M, Nakazawa K, Takagi A, et al. Brugada Syndrome-Like ST-Segment Elevation Increase Exacerbated by Vomiting. Circ J. 2004; 68:712-714.