

Swallowing Syncope in a 14 year-old girl with an atypical course of the oesophagus

*Henn K., Pohler J., Fritsche K., Dundurs D., Kriebel T.
Department of Paediatrics, Westfalz-Klinikum Kaiserslautern, Germany*

Introduction: Reports about swallow-induced syncopes are rare, mostly diagnosed after several years and multiple syncopes and seen in patients with cardiac diseases or oesophageal disorders such as achalasia, spasm, herniation, diverticulum and cancer.

Patient: We present a 14 year-old female who was admitted to hospital due to a single syncope. In subsequent Holter monitorings intermittent episodes of complete AV-Block with pauses up to 5.4 seconds could be documented.

The Holter monitoring showed a coincidence of the AV-block with meal times. Retrospectively the patient indicated to have dizziness always when eating.

An ECG recorded while the patient was eating and swallowing confirmed an intermittent complete AV-block.

A mediastinal MRI scan revealed an abnormal course of the oesophagus, which crosses caudal the thyroid gland to the left and runs for 2 – 3 cm in close proximity to the left common carotic artery and the vagus nerve.

According to the current guidelines a pacemaker was implanted to prevent bradycardia induced syncopes.

After implantation swallowing-induced pacemaker activity could be seen in ECG, the Holter monitoring showed also multiple pacemaker stimulation during meal times.

During follow up no further syncopes or dizziness have been noted, repeated Holter ECG and pacemaker interrogations confirmed that the pacemaker is in frequent use.

Conclusion: To the best of our knowledge this is the first report of an atypical course of the oesophagus in connection with a swallow-induced syncope. By this close proximity of the oesophagus and vagus nerve it is conceivable that swallowing can cause an abnormal vagal reflex leading to a high-degree AV-block.