

Belching as a Presenting Symptom of Angina Pectoris

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ظاهرة التَجَشُّؤ كعرض للذبحة الصدرية

كوثر طه الشافيع

المخلص: أعراض الذبحة الصدرية يمكن أن تظهر بالأعراض المعروفة والتي من السهل تشخيصها، أو بأعراض غير واضحة مثل القشعريرة، الغثيان، الدوخة، التَجَشُّؤ وألم خفيف بالصدر. وكلتا الحالتين نادرا ما تصاحبها أو تغطي عليها أعراض خارج القلب والتي أحيانا تظهر في منطقة البطن. نورد هنا حالة غير معتادة للذبحة الصدرية، رجل يبلغ من العمر اثنان وستون عاما. لم يكن يعاني من مرض طوال حياته. بدأ يشكو من نوبات التَجَشُّؤ ولمدة شهرين كشكوى وحيدة وأساسيه. قد وجد أنه يعاني من الذبحة الصدرية علي الرغم من عدم وجود الأعراض أو العلامات المعهودة التي تدل على ذلك. تم علاجه بنجاح بواسطة الجراحة. ومن هنا يمكن أن نستنتج أن ظاهرة التَجَشُّؤ يمكن أن تكون عرضا للذبحة الصدرية.

مفتاح الكلمات: الذبحة الصدرية، أعراض، التَجَشُّؤ، تقرير حالة: عمان.

ABSTRACT Symptoms of angina pectoris can present with the typical specific symptoms, which are easy to recognize, or vague symptoms like chills, nausea, dizziness, belching and mild chest pain. Both the typical and atypical forms of angina symptoms may rarely be associated with or masked by predominantly extra cardiac manifestations, which are occasionally referred to the abdomen. We report here an unusual presentation of angina. A 62 years old male who had been healthy all his life, presented at Sultan Qaboos University, Oman, with a two month history of belching episodes as the chief and the only complaint. He was found to have angina pectoris, although there were no classical symptoms or signs to suggest it. He was treated successfully by surgery. It is concluded that belching can be a presenting symptom of angina.

Keywords: Angina pectoris, symptoms; Eructation; Case report; Oman.

IN THE AGE OF TECHNOLOGY, SIMPLE HISTORICAL features of pathologic processes are often overlooked as diagnostic aids. To most patients, belching, chills and fatigue do not sound like symptoms of heart attack. As a result, many sufferers do not seek medical attention, or they delay it, which can result in permanent damage to the heart muscle or even death.¹ A recent research study indicated that most patients with recent heart attacks had symptoms different from those they expected.² As a result, medical treatment was significantly delayed.

There is increasing awareness that associated symptoms of anginal chest pain, do not reliably distinguish between cardiac and gastrointestinal origins of chest pain, which can coexist in up to 35% of patients. Belching or painful swallowing are suggestive of esophageal

disease, although belching and indigestion may be seen with myocardial ischaemia.^{3,4,5} Belching as an isolated symptom of angina without chest pain, have not been reported before, and was not included as a common presenting symptom of angina pectoris in the standard textbooks of medicine and cardiology. We report an otherwise healthy middle aged man with a typical anginal symptom that presented with belching and was treated successfully by surgery.

CASE REPORT

A 63 years old male, who had had normal health all his life, presented at Sultan Qaboos University, Oman, with a history of belching episodes following a sensation of gas in the stomach for two months duration. He noticed these symptoms only during physical effort

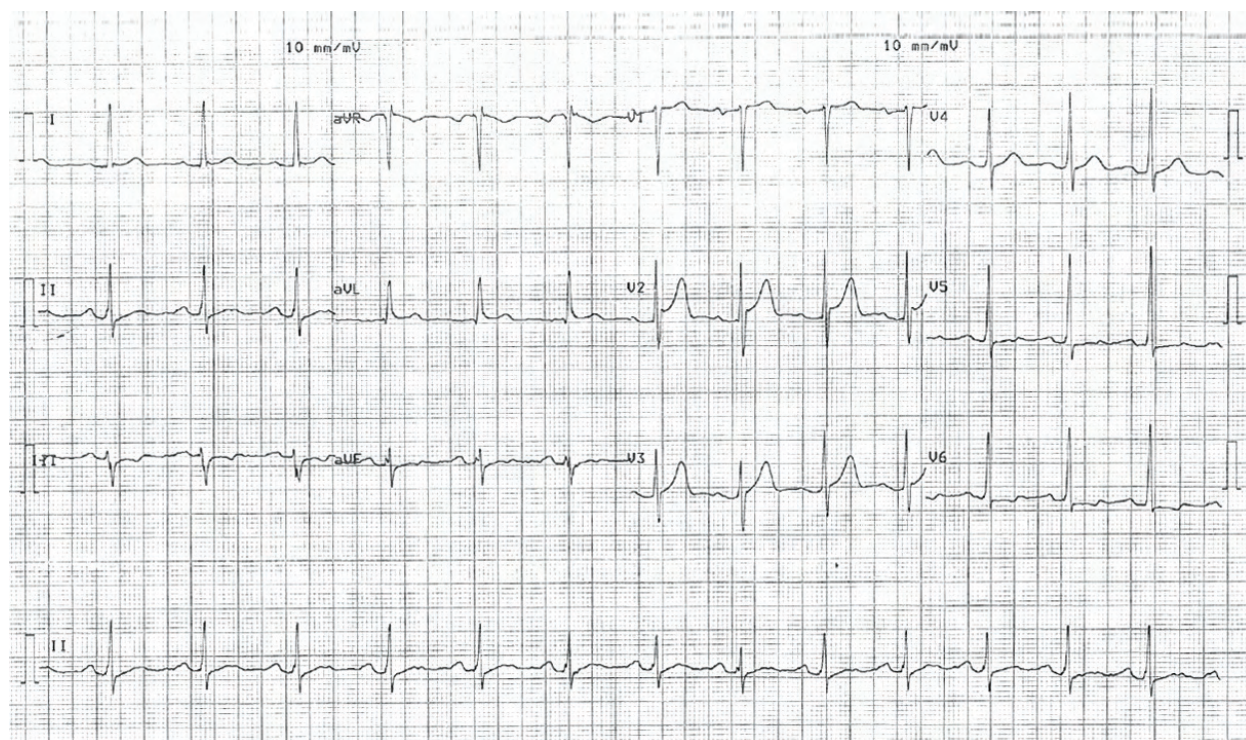


Figure 1: A normal ECG record for the Patient during rest

such as walking, going up the stairs or with emotional stress. It was not associated with chest pain or any other gastrointestinal symptom. The belching was not related to eating meals and was absent at rest. There was no past history of epigastralgia or chest pain. He had no prior history of surgery. He had not used any medication recently and had no drug allergy.

The general physical examination was normal, including pulse and blood pressure. His body mass index (BMI) was 25. Investigations done, including complete blood count, electrolytes, creatinin, liver function tests, lipids and glucose were normal. A resting electrocardiogram was normal. A stress test electrocardiogram was strongly positive for angina pectoris. Coronary angiography showed 50% narrowing at the left anterior descending (LAD), both branches of the circumflex artery and 98% blockage of the right coronary artery (RCA) and its branch, the posterior descending artery (PDA).

The patient underwent coronary artery bypass grafting (CABAG) surgery and was put on statins and aspirin medication. Since then he has remained asymptomatic and his BMI has not changed.

DISCUSSION

The only explanation for the cause of belching in this patient was angina pectoris. He had no other risk factors relating to a gastric problem such as drugs, relation to meals or stressful events.⁶ The symptoms were confined mainly to effort and emotions, which were the clues for the diagnosis. The diagnosis was confirmed by a strongly positive stress test during which he experienced the same symptoms without chest pain, besides an abnormal coronary angiography and the disappearance of the symptom after surgery.

Our patient did not present with the typical specific symptoms of myocardial ischaemia, which are easy to recognize, but he presented with an atypical symptom which can easily be missed.¹ Belching, chills and fatigue do not sound like symptoms of heart attack to most patients; as a result many sufferers do not seek medical attention or they delay it, which can result in damage to the heart muscle and even death.¹ The relative infrequency or lack of specificity of this symptom reduces its value in diagnosing ischaemic heart disease. A good history taking helped in the diagnosis and early intervention for this patient.

Most studies report the association of belching with the chest pain of myocardial infarction, but none

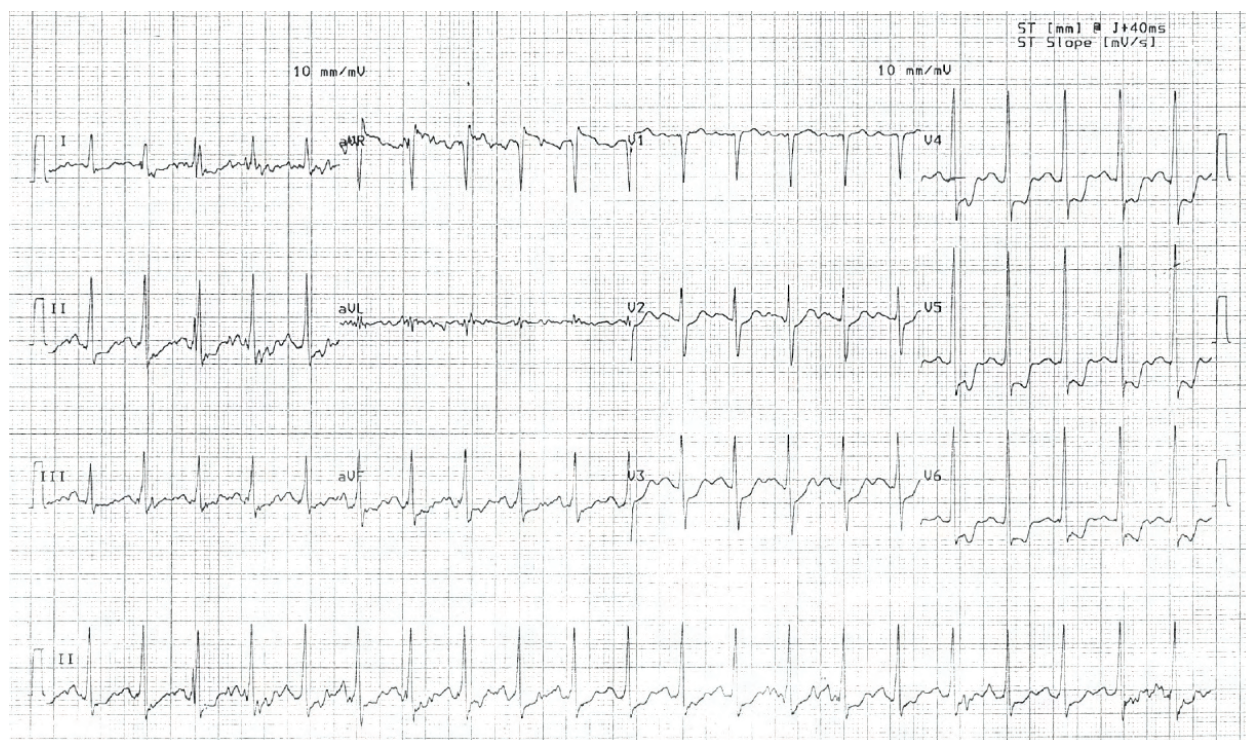


Figure 2: A stress test ECG record for the Patient, which shows a strongly positive test with reversible horizontal ST depression in the inferior and lateral leads

relates the symptom either exclusively to or associated with the pain of angina.^{7,8} Previous studies reported the association of belching with inferior myocardial infarction.⁹ Another noticed its association with Q wave infarction and the predictive value for belching with infarction is 72%.⁷ These patients could have been diagnosed earlier by the general practitioner before presenting to the accident and emergency department. Sweating is not the only symptom, other than chest pain, which predicts infarction.¹⁰ Others have reported an association of nausea, vomiting and belching.^{8,11} This symptom can certainly also be associated with non cardiac causes of chest discomfort (such as aerophagia or peptic ulcer),¹² but when it is associated with coronary artery disease, it always indicates inferior wall ischaemia.⁹

The mechanism may be the marked vagal stimulation associated with inferior infarction causing gastric distress and subsequent gas formation.⁸ The association of belching with inferior infarction suggests an enhanced autonomic response to ischaemic heart disease at this site.⁹ The predominance of our patient's symptom can be explained by inferior wall ischaemia induced by an almost occluded PDA, which probably

masked other symptoms induced by the other partially narrowed coronary vessels.

CONCLUSION

The diagnosis of angina pectoris by the nature of resultant pain or discomfort is unreliable. While a number of associated symptoms, particularly belching, do have a higher predictive value, our report reinforces the need for a good history taking and earlier objective electrocardiographic information to prevent cardiac muscle damage and even death.

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