

### Acute anterior myocardial infarction accompanying metastatic intracavitary colorectal carcinoma causing right ventricular outflow obstruction: a rare mixture

Colorectal cancer is the third and second most common cancer in men and women, respectively. Colorectal carcinoma metastasis to the right ventricle is so rarely reported, which is generally demonstrated in autopsies. Acute myocardial infarc-

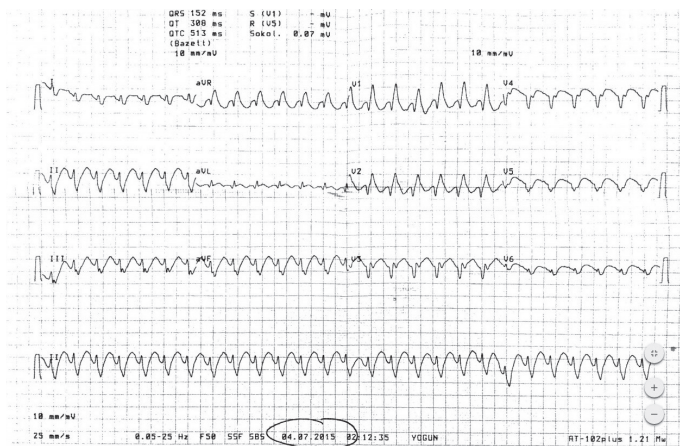


Figure 1. Electrocardiogram with right bundle branch block and acute anterior myocardial infarction, with a sinus rhythm of 152 beats/min

tion could play a role in diagnosing colorectal cancer metastasis. Here we present a 53-year-old man who smoked, was diagnosed with schizophrenia, and experienced cardiopulmo-

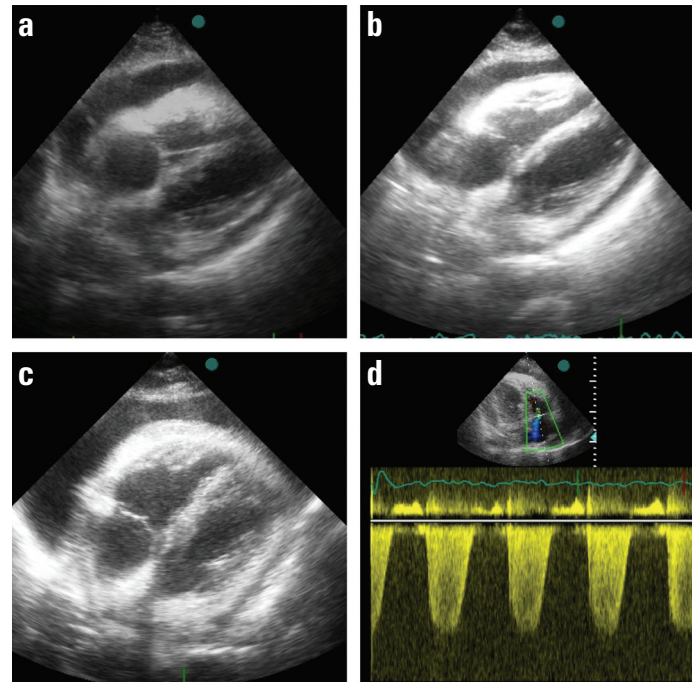


Figure 2. a–c shows the right ventricular apical mass with massive pericardial effusion surrounding all the chambers of the heart. D shows pulmonary arterial pressure as 52 mm Hg

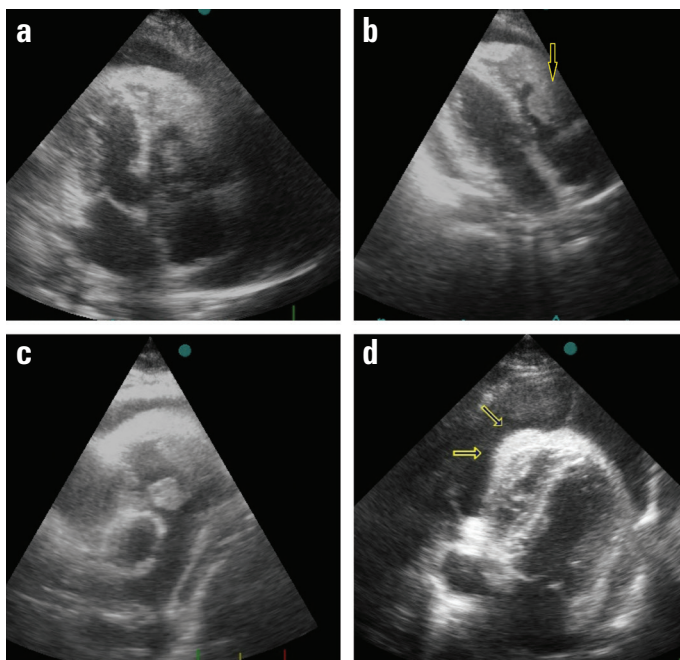


Figure 3. a, b shows the right apical ventricular mass elongating to mitral valvular apparatus. C shows the right ventricular outflow obstruction from modified parasternal short axis view. D shows massive pericardial effusion collapsing the right ventricle in diastole

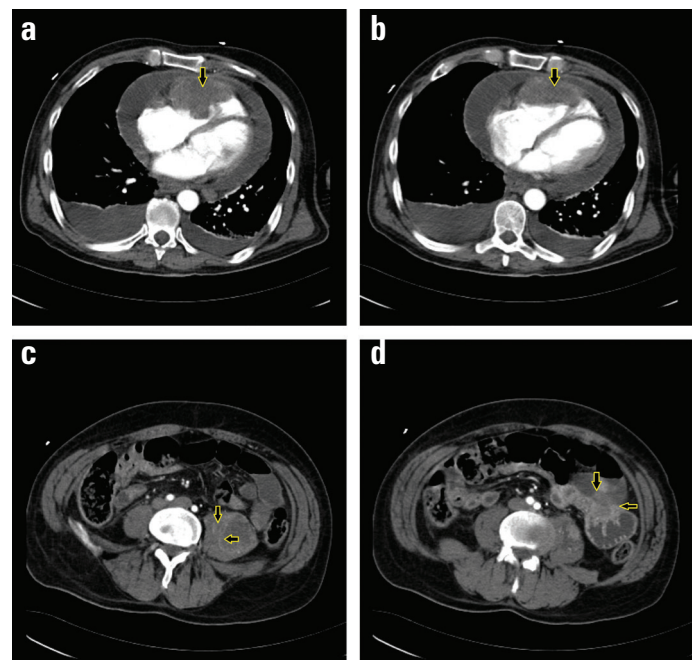
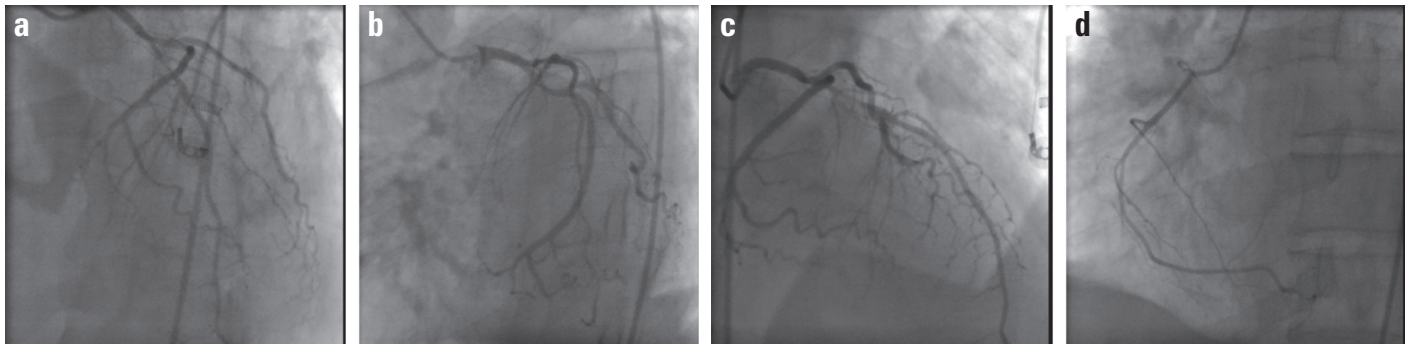
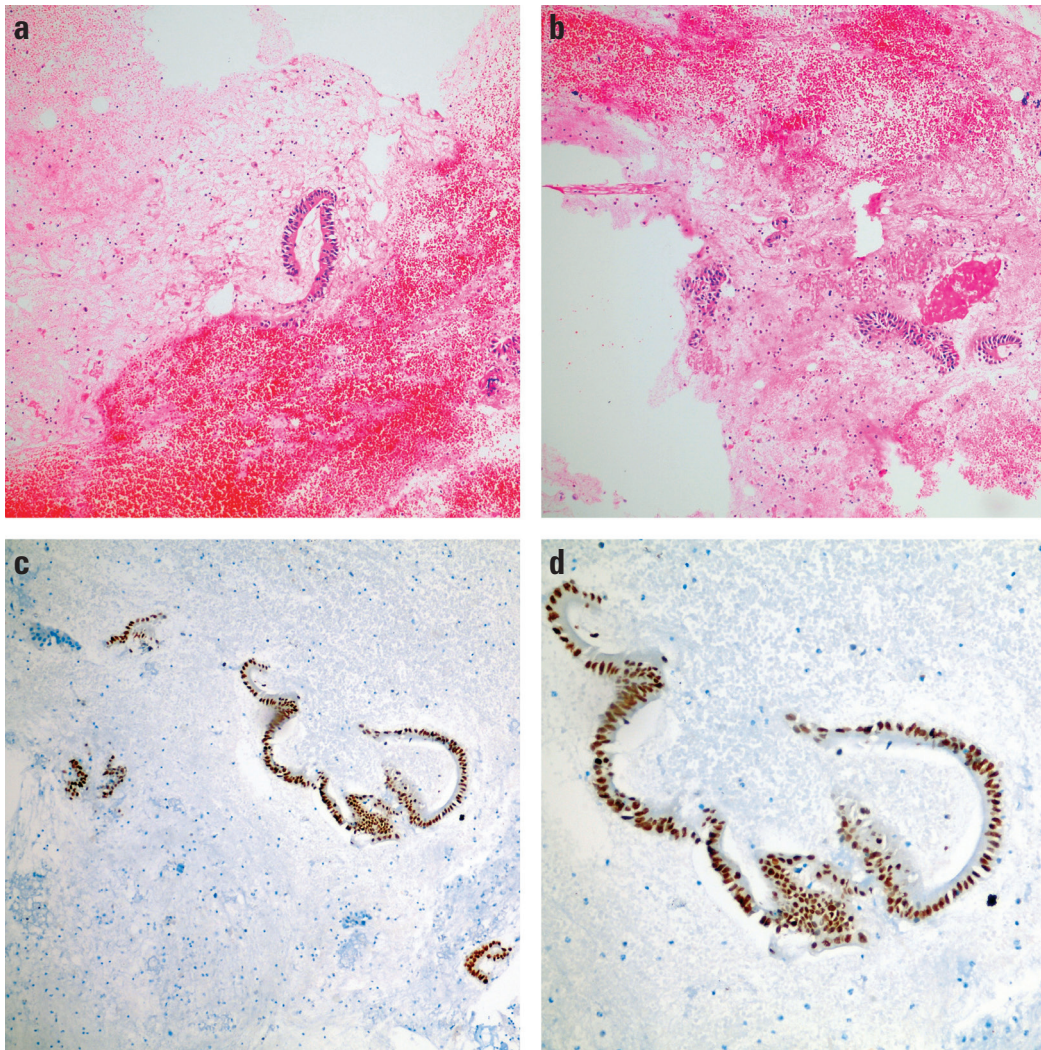


Figure 4. a, b shows transverse view of the thorax; contrast-enhanced CT shows the right ventricular mass (62x42 mm) causing RVOT obstruction. C shows the hypodense lesion in the left psoas muscle (4.5x4 cm). D shows concentric wall thickenings and partial luminal obstructions in the ileocecal junction



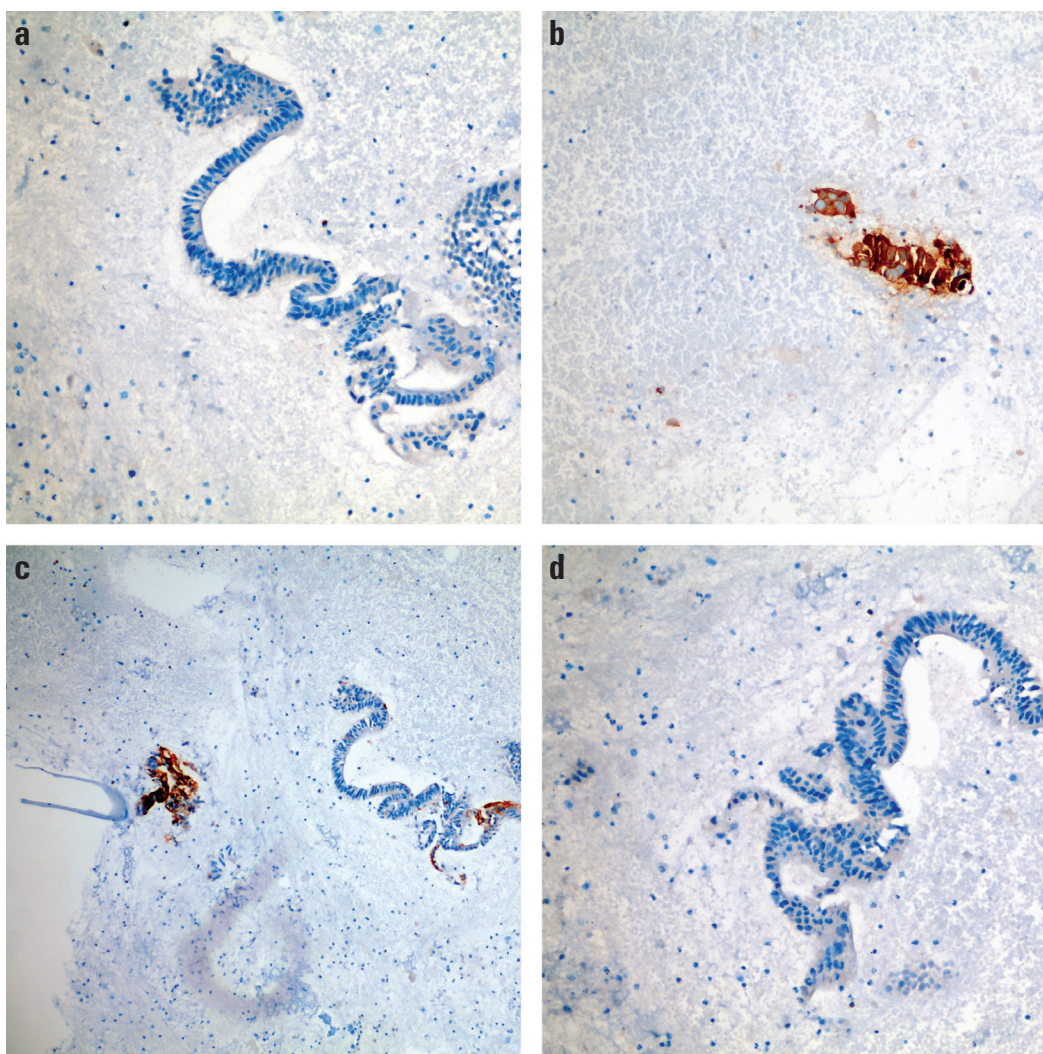
**Figure 5.** a–c shows the proximal critical lesion on the left anterior descending artery. D shows the normal right coronary artery with increased collateral vessels



**Figure 6.** a, b shows the gross mass of the cell block obtained from pleural fine-needle aspiration biopsy. c, d demonstrates CDX2 (+)

nary arrest because of right ventricular outflow tract (RVOT) obstruction along with acute myocardial infarction. Electrocardiogram revealed right bundle branch block and diffuse ST segment elevation in precordial leads (V1–V6), with a sinus rhythm of 152 beats/min (Fig.1). Transthoracic echocardiography assisted in detecting the massive pericardial effusion surround-

ing all chambers of the heart completely, maximally adjacent to the right atrium with approximately 3 cm and right ventricular mass with dimensions of 61x41 mm (Fig. 2a–d; Fig. 3a–d). Contrast-enhanced computer tomography revealed the origin of the metastasis. Left lower quadrant ileocecal region exhibited concentric wall thickenings and partial luminal obstructions.



**Figure 7. a CD5/6(-), b shows CK 7 focally +, c shows CK 20 focally +, d shows p63(-)**

Moreover, a mass, measuring 4.5x4 cm, was detected on the left iliopsoas muscle, which was also considered to be a metastasis (Fig. 4a-d). Coronary angiography was performed to strengthen the hemodynamic stability; percutaneous coronary intervention was postponed because of TIMI III flow in the left anterior descending artery and comorbidities (Fig. 5a-d). Fine-needle aspiration biopsy specimen from the pleura was used in cell block immunohistochemical staining, which confirmed the lower gastrointestinal tumor (Fig. 6a-d; Fig. 7a-d). Unfortunately, the patient died in the coronary intensive care unit after 2 days of follow-up.

**Mert İlker Hayıroğlu, Muhammed Keskin, Osman Uzman, Muhammed Burak Günay, Medine Özgür<sup>1</sup>, Ahmet Okan Uzun, Mehmet Eren**  
**Department of Cardiology, Dr. Siyami Ersek Thoracic and Cardiovascular Surgery Center Training and Research Hospital, İstanbul-Turkey**  
<sup>1</sup>**Department of Pathology, İstanbul Training and Research Hospital, İstanbul-Turkey**

**Address for Correspondence:** Dr. Mert İlker Hayıroğlu  
 Cüneyt Koşal Sok. Uyum Apartmanı, Acıbadem Üsküdar, İstanbul-Türkiye  
 E-mail: mertilkerh@yahoo.com  
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