A 73-year-old man who had been transferred to our emergency room due to sudden chest pain was diagnosed with ST-segment elevation myocardial infarction (STEMI).

He had no coronary risk factors except for a history of smoking for 50 years.

Primary percutaneous coronary intervention was performed, and a long, string-shaped contrast defect was observed in the left anterior descending artery (Fig.1A).

Optical coherence tomography (OCT) imaging revealed an odd, smooth-surfaced 50-mm long object (Fig.1B).

A long, white object which looked like a parasitic worm was retrieved via intracoronary aspiration and revascularization was successfully completed since neither plaque rupture or the presence of thrombus was detected by OCT (Fig.1C).

On the eleventh hospital day, transthoracic echocardiography revealed a new floating object in the left atrium.

Contrast computed tomography revealed a huge 7x6 cm mass that was recognized at admission in the right upper pulmonary lobe with direct pulmonary vein invasion (Fig.1D).

Although the bronchoscopic findings were negative for a lung tumor, a histopathologic examination of the aspirated coronary object revealed pleomorphic lung carcinoma (Fig.2).

The patient was diagnosed with STEMI due to coronary embolization associated with lung carcinoma.

Brain MRI revealed that the patient had an asymptomatic cerebral infarction in the right frontal lobe and a small parietal lobe lesion was diagnosed to be metastasis.

Given all these observations, he was diagnosed with right lung carcinoma, stage IV (c-T2bN2M1b).

He was treated according to the chemotherapy regimens (carboplatin & paclitaxel) known to be effective for the treatment of advanced non-small cell lung cancer.

He responded to the treatment and showed a good clinical course afterwards (Fig.3).

Chemotherapy with a total of 9 cycles of the same regimen was used and the carcinoma progression was suppressed. He has been doing well for more than two years of PCI and has been followed-up regularly.