Kardiologia Polska 2013; 71, 10: 1098; DOI: 10.5603/KP.2013.0275 ISSN 0022–9032

STUDIUM PRZYPADKU / *CLINICAL VIGNETTE*

Massive pulmonary embolism due to giant right ventricle thrombus

Masywna zatorowość płucna spowodowana przez ogromną skrzeplinę w prawej komorze

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An 85-year-old woman was admitted to hospital because of progressive dyspnoea at rest of a few months' duration, with weakness and syncope on the day of hospitalisation. On physical examination, we noted blood pressure: 130/80 mm Hg, breathlessness, and peripheral oedema. Electrocardiogram showed sinus rhythm: 61 bpm, right axis deviation: QRS axis +130°, S_I-Q_{III}-T_{III} sign, negative T wave in leads: II, III, aVF and V_1–V_6; PQ interval: 146 ms, QRS: 124 ms and right bundle branch block. Low QRS voltage in precordial leads, QT prolongation: 488 ms, QTc prolongation: 484 ms (Fig. 1). Pulmonary embolism (PE) was suspected, echocardiography showed enlarged right ventricle (RV) — end-diastolic diameter: 44 mm, normal left ventricle — end-diastolic diameter: 39 mm, with paradoxical septum motion due to RV overload. A giant thrombus filling almost the whole RV cavity was seen. Computed tomography angiography showed massive bilateral PE with enlarged RV and confirmed the huge thrombus in the RV (Fig. 2). The patient refused an operation and fibrinolytic therapy. Unfractionated heparin and oral anticoagulation were started. Over the next few days we observed multiorgan failure (mainly renal and hepatic failure), leading finally to patient death.

This case illustrates two problems: (1) an uncommon huge thrombus in the RV; and (2) that the mortality rate is very high in situations where the patient refuses appropriate therapy (fibrinolytic therapy or embolectomy) in this kind of PE.

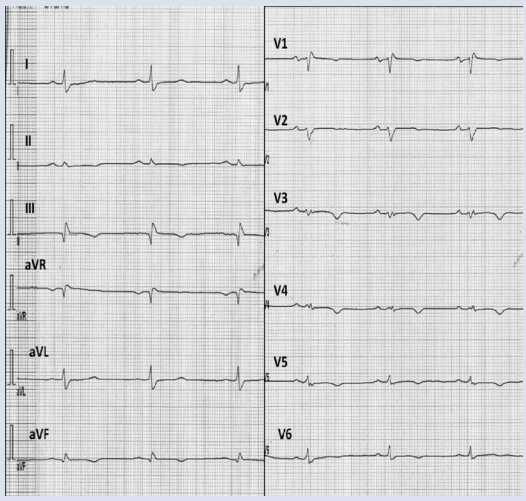

Figure 1. Electrocardiogram on admission — sinus rhythm: 61 bpm, right axis deviation: QRS axis +130°, S_I-Q_{III}-T_{III} sign, negative T wave in leads: II, III, aVF and V_1–V_6; PQ interval: 146 ms, QRS: 124 ms and right bundle branch block; low QRS voltage in precordial leads, QT prolongation: 488 ms, QTc prolongation: 484 ms

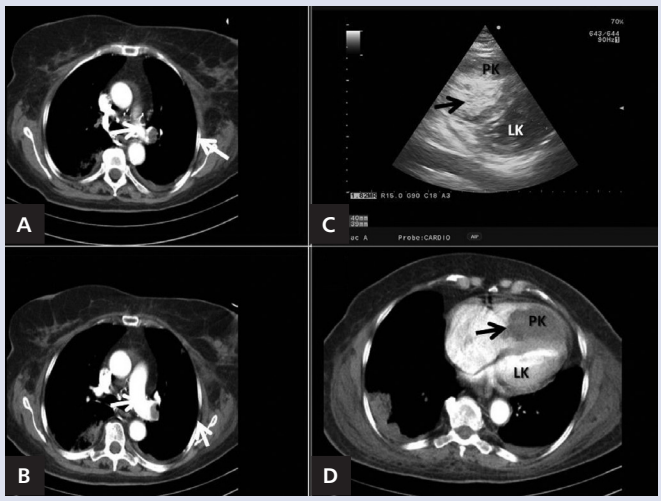

Figure 2. **A**, **B**. Angiography computed tomography — bilateral pulmonary embolism (white arrow); **C**. Echocardiography — parasternal, short axis view — giant thrombus filling whole right ventricle (PK) cavity (black arrow); **D**. Angiography computed tomography — enlarged right ventricle (PK) with giant thrombus filling almost the whole right ventricle cavity (black arrow); LK — left ventricle

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Conflict of interest: *none declared*