CLINICAL SNAPSHOT

Transvenous Migration of a Puncture Needle into the Pulmonary Trunk

Intraoperative view with a puncture needle in the pulmonary trunk

A 44-year-old man known to be an intravenous drug user was admitted after several days of dyspnea and respiration-related thoracic pain with the initial diagnosis of tachyarrhythmia absoluta (atrial fibrillation >100 bpm). There were no further underlying cardiac morbidities. During self-mobilization on an ordinary ward the patient unexpectedly suffered a syncope. A hemorrhagic pericardial effusion diagnosed by transthoracic echocardiography with echocardiographic demonstration of its hemodynamic relevance in the presence of stable circulatory conditions was decompressed by pericardial drainage. Subsequent computed tomography showed a slender intracardiac foreign body and a persistent pericardial effusion. Intraoperatively we found a 4-cm-long

puncture needle that had perforated the pulmonary trunk (arrow) and was continuously leaking blood. In the absence of a thoracic entry site, the needle most probably broke off after intravenous drug injection and migrated transvenously through the right heart into the pulmonary trunk. The needle was successfully removed and the patient's postoperative recovery was free of complications. He was transferred to an inpatient drug withdrawal unit in good general condition.

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Conflict of interest statement: The authors declare that no conflict of interest exists.

Translated from the original German by David Roseveare.

Cite this as: Kreibich M, Beyersdorf F, Rylski B: Transvenous migration of a puncture needle into the pulmonary trunk. Dtsch Arztebl Int 2019; 116: 430. DOI: 10.3238/arztebl.2019.0430