Isolated Atrial Infarction

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A 50-YEAR-OLD CAUCASIAN MAN was hospitalized with dyspnea and asthenia. The present illness started suddenly four days before with dyspnea, nausea and vomiting, weakness, and transitory drop of blood pressure from 140/100 mm Hg to 100/70 mm Hg. Family and past history were both negative. The patient continued his job up to the admission.

Physical examination showed a pale, well-nourished man, with cyanosis of the lips, tachypnea (30/min), and regular tachycardia (150 beats per min). Blood pressure was 135/100 mm Hg.

Despite sustained treatment death occurred 11 hours later.

The electrocardiogram recorded at the admission (Fig. 1) showed sinus tachycardia (150 beats/min), abnormal P waves (notched in leads II, III, aVR), with an amplitude of 0.2 mV in leads II, III, AP +80), downward displacement of the P-R (S-Ta) segment in leads III, aVF, and mainly in II, V3, V4 (0.2 mV), upward displacement of the same in leads aVR, aVL, a QR pattern in leads II, III, aVF (not altered in deep inspiration). The S-Ta vector was oriented at -90, pointing to the left atrium. The Q-T interval (0.29 sec) was prolonged.

Both clinical and ECG findings suggested acute coronary heart disease. Our diagnosis was: atrial infarction, possible posteroinferior ventricular infarction (sequelae?).

The postmortem examination (performed by Dr. F. Halalau) showed a hemorrhagic area of 7/3 cm on the posterior wall of the left atrium—near the septum. Histologically there was an area of necrosis of 1/1.5 cm with hemorrhage. The mitral valve, the aorta, and coronary arteries presented numerous atheromas.

Only a few cases of isolated infarction of the atria are reported. The case described

![Electrocardiogram at the admission (96 hours after the onset).](image-url)
showed several aspects mentioned in previous studies on atrium infarction; rhythm changes, P wave and S-T, segment abnormalities. Careful examination of P wave and P-Q segment in coronary heart disease would lead to a more frequent recognition of atrium infarction.

Readers are invited to submit articles for the Electrocardiogram of the Month. Please submit material to Stephen R. Elek, M.D., 465 North Roxbury Drive, Beverly Hills, California.

OPERATIVE TREATMENT IN RENOVASCULAR HYPERTENSION

The authors report a case of development in a young woman of a high stable hypertension caused by stenosis of the right renal artery. As the result of reconstructive operation—autovenous plastic repair—the function of the right kidney and arterial pressure reverted to normal. The formation of an aneurysm at the site of the autovenous graft five months postoperatively resulted in circulatory disturbance in the kidney and in recurrence of hypertension. After nephrectomy, the arterial pressure normalized.

The authors report that hypertension in affection of the renal artery is due to the increased production of renin by the ischemized kidney, inasmuch as there was found a high activity of angiotensin and renin in the arterial blood and a still higher one—in the venous blood outflowing from the kidney. There was also seen a high activity of renin, hypertrophy and hyperplasia of the juxteduillary apparatus, as well as its increase in the removed kidney. The case reported by the authors is a complete clinical analog of Goldblatt's hypertension. Petrovsky, B. V., Kaylov, V. S., Arabidze, G. G., Sera-Avchik, Y. A., Vishket, A. M., Kramer, A. A., Mattveev, L. S., Pal'eva, F. M. and Chernova, N. A.: 'The operative treatment of a patient with renovascular hypertension and the importance of the renin-angiotensin system in its development,' Clin. Med., (USSR), 44:19, 1966.

TUBERCULOUS LOBITIS

Following a short review of the literature on the effectiveness of cortisone and its derivatives in tuberculous conditions, a report of 12 cases of tuberculous lobitis, treated with antimycobacterial drugs in combination with corticosteroids, as well as the clinical and x-ray findings are presented. The cases are discussed individually and the rather quick regression of the condition is pointed out. Emphasis is laid upon the absence of the usual retracting fibrosis of the lobe and on the "restitutio ad integrum" of the x-ray pattern of the lobe.


PULMONARY CIRCULATION

Twenty-one patients with pulmonary hypertension secondary to rheumatic mitral valve disease were submitted to right and left heart catheterization and received a continuous intravenous infusion of synthetic bradykinin (average dose, 0.98 μg/kg/min). The drug elicited in appreciable fall of the systemic vascular resistance simultaneously with a decrease of the mean systemic arterial pressure and an increase of the cardiac output in all cases. In the pulmonary circulation, the increase in blood flow was coincident with a rise of the mean arterial and venous (left atrial) pressures in 19 and all patients, respectively. The pulmonary vascular resistance fell in 19 patients. The changes in the lesser circulation were interpreted as expressing secondary effects, either mechanical or reflex, consequent to the action of bradykinin on the systemic vessels and heart rather than a direct effect of the drug on the pulmonary vessels.