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ECG Quiz

Lt Col RG Poduval*, Dr Shankar Dutta⁺

MJAFI 2003; 59 : 127

Clinical Information

36 year old female patient, a known case of rheumatic heart disease with mitral and aortic regurgitation (closed mitral valvotomy done for mitral stenosis 7 years ago), on digoxin, diuretics, oral potassium and erythromycin prophylaxis, was admitted with severe

dyspnea and palpitations at rest. Clinically patient had irregular heart rate above 150/min, blood pressure 80/60 mm Hg and pulmonary edema. Electrocardiogram before and after 250 mg intravenous phenytoin sodium is shown below. What is your diagnosis?

Fig. 1 :

Answer to the ECG quiz - pg. 165

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overestimates the degree of stenosis. This occurs because the image of the vessel in MR angiography is a flow-related phenomenon, therefore severe stenosis with flow compromise results in poor visualization of the vessel [6]. In conclusion, it is emphasized that although MRI is an ideal modality for imaging the posterior fossa, vascular lesions can be accurately imaged using spiral CT angiography with 3-D reconstruction and the results are comparable [7].

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Answer to ECG Quiz

Multifocal Atrial Tachycardia (MAT)

The ECG shows irregularly irregular tachycardia of rate 250/min with P waves of varying morphology (arrows). The two criteria required to meet the definition of MAT are a rate exceeding 100/min and a minimum of three consecutive P waves of different morphology [1]. MAT may be a manifestation of digitalis toxicity, severe cardiac or pulmonary disease, hypokalemia or theophylline and adrenergic drug effect. Phenytoin is the drug of choice for digitalis-induced supraventricular and ventricular arrhythmias as

illustrated in this case [2]. The concomitant administration of erythromycin probably precipitated digitalis toxicity [3].

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