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CORRESPONDENCE

Epilepsy Research Group

Dear Sir,

We read, with interest, the article by Dr. Zaidi and coworkers published in a recent issue of your journal regarding the use of an implantable ECG monitor and its effectiveness in diagnosing convulsive syncope¹.

We have recently investigated a very similar patient with recurrent fortnightly episodes of loss of consciousness with cardiac asystole (up to 25 seconds duration) who was diagnosed with prolonged simultaneous ambulatory EEG/ECG monitoring. Routine neurological and cardiological investigations including 24-hour EEG were normal. It was of note, however, that during the 340 hours of continuous monitoring, the captured episode was associated with an EEG abnormality consistent with bilateral frontal ictal activity 23 seconds before the onset of cardiac asystole. Following pacemaker insertion and an adjustment of his antiepileptic medication he has had no further episodes. On subsequent pacemaker checks it was noted that the device had never been required to activate, suggesting that good control of his cerebrogenic cardiac asystole had been achieved with medication.

Ictal arrhythmias are common and although tachycardia is more frequent, bradycardia and asystole have been described². The majority of patients have temporal lobe seizures³. Additionally, experimental work has suggested that stimulation of the insular cortex in rats is associated with cardiac rhythm disturbances⁴.

The patient reported in the article described episodes of a 'nightmarish rush of fear' or 'déjà vu' before an episode of loss of consciousness, which are common phenomena of temporal lobe seizures. We would suggest therefore that the patient may have an epileptic basis to the asystole and although pacemaker insertion is advocated in these cases, a truly accurate diagnosis of unexplained syncope is only obtained with simultaneous EEG/ECG monitoring.

REFERENCES

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