

# Quinidine therapy and therapeutic drug monitoring in four patients with *KCNT1* mutations

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## BACKGROUND

- Many epilepsy patients with *KCNT1* mutations, including patients with EIMFS, are intractable to conventional treatment.
- Although it is expected that quinidine is effective for epilepsy with *KCNT1* mutations, the effectiveness remains to be revealed and more case reports are needed.

## CONCLUSIONS

- Since this report is the first to describe side effects of arrhythmia (ventricular tachycardia) due to quinidine treatment, this should alert clinicians to the dangers of excessive intake of quinidine.
- Blood quinidine level during long-term hospitalisation is frequently measured in our institution compared to other major hospitals, and although different quinidine doses and concentrations were extensively documented, we were unable to identify any correlation especially at high doses (which may be near toxic levels). However we believe that clinicians should be aware of this, as quinidine levels fluctuate unstably at high doses, which may be of significance.