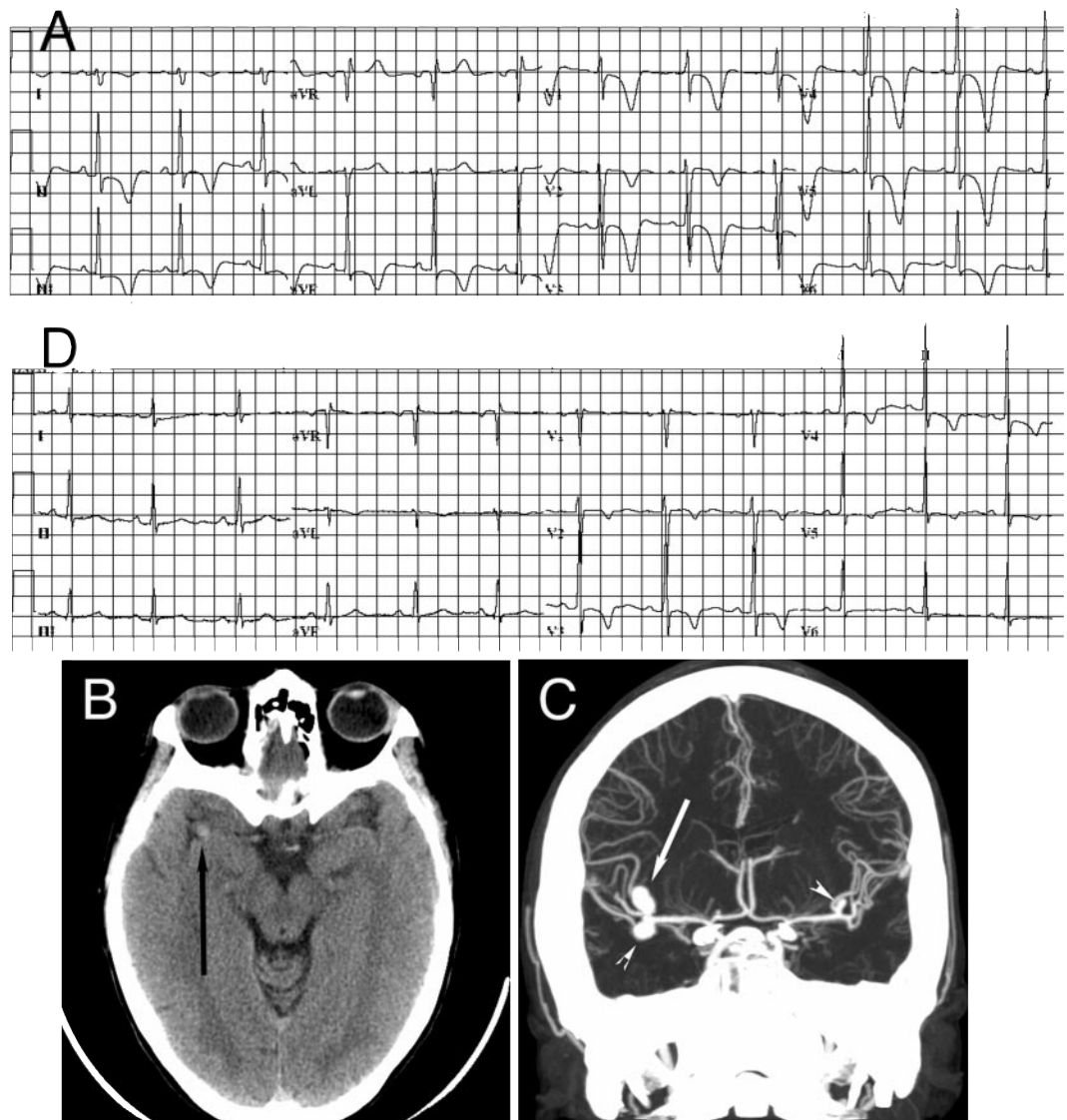


Teaching *NeuroImage*: Cerebral T-waves from an aneurysmal cardunculus compression

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Figure ECGs and head CT/CTA



Preoperative ECG shows diffuse T-wave inversions (QTc 459 msec) (A). Noncontrast head CT shows a right peri-insular hyperdensity (B, arrow); CTA shows one right middle cerebral artery aneurysm compressing the insula (arrow) and two other aneurysms (arrowheads) (C). Postoperative ECG shows reversal of T-waves in precordial leads (QTc 408 msec) (D).

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A 41-year-old woman developed temporary substernal chest pain. Physical examination was normal. ECG showed diffuse T-wave inversions with nonfamilial/non-medication-related QTc prolongation (figure, A) persisting despite the resolution of chest pain after sublingual nitroglycerin. Normal serum/urine toxicology, cardiac enzymes, transthoracic echocardiogram, and resting Technetium-99m sestamibi study raised the suspicion for cerebral T-waves. Head CT/CT-angiogram (CTA) revealed a middle cerebral artery aneurysm compressing the cardunculus,¹ in the right anterior inferior insula

(figure, B and C). Partial ECG normalization (figure, D) by cardunculus decompression (1 month after aneurysm clipping) supports that it is the regulator of sympathetic cardiac outflow balance.^{1,2}

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