Causas de intervalo QT curto - 2010

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A) Acquired and Drug-related Short-QT Syndrome

- Acidosis;
- Alterations of the autonomic tone;
- Digoxin toxicity and digoxin effect
- Hypercalcemia:
- Hyperthermia;
- Increased potassium plasma levels;

B) Hereditary or Familial Short-QT Syndrome

Types	Gene Mutation	Channel affected
SQT1	KCNH2 (HERG)[1]	Increase IKr
SQT2	KCNQ1[2]	Increase IKs
SQT3	KCNJ2[3]	The inwardly rectifying Kir2.1 IK1

Loss-of-function mutations in CACNA1C and CACNB2b, encoding L-type calcium channel subunits have been identified.

1) Brugada R, Hong K, Dumaine R, et al. Sudden Death Associated With Short-QT Syndrome Linked to Mutations in HERG. Circulation 2004; 109: 30-35.
2) Bellocq C, van Ginneken AC, Bezzina CR, et al. Mutation in the KCNQ1 gene leading to the short QT-interval syndrome. Circulation 2004; 109:2394-2397.
3) Priori SG, Pandit SV, Rivolta I, et al. A novel form of short QT syndrome (SQT3) is caused by a mutation in the KCNJ2 gene. Circ Res. 2005 Apr 15;96(7):800-7. Epub 2005 Mar 10.
4) Antzelevitch C, Pollevick GD, Cordeiro JM, et al. Loss-of-function mutations in the cardiac calcium channel underlie a new clinical entity characterized by ST-segment elevation, short QT intervals, and sudden cardiac death. Circulation. 2007 Jan 30;115(4): 442-9.