

Verlengd qt syndroom

VERLENGD QT SYNDROOM

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1. Oorzaken

- mechanismen

- wijzigingen in cardiaal intracellulair natrium, kalium of calcium. Hierdoor ontstaat een verlengde ventrikelrepolarisatie, wat zich op ECG uit in een verlengd QT-interval en ritmevariaties (sinusaal complex, een extrasystole, daarna een pauze). Dit geeft risico op reëntry tachycardie met torsades de pointes, ventrikeltachycardie of ventrikelfibrillatie.

- toxicologische oorzaken:

- vaak is er een genetische achtergrond.

- medicatie:

- anti-arhythmica

- klasse 1a (quinidine, procainamide, disopyramide)

- klasse 3 (sotalol, ibutilide, amiodarone)

- antibiotica

- erythromycine

- pentamidine

- chloroquine

- trimethoprim-sulfamethoxazole

- antihistaminica

- psychotrope medicatie

- phenothiazines

- haloperidol

- risperidone

- TCA's

- insecticiden: organofosfaten

- cardiale oorzaken

- bradyarrhythmieën

- AV blok

- mitralis klepprolaps

- myocarditis
- myocardischaemie
- metabole oorzaken
 - elektrolytenstoornissen: hypokaliëmie, -magnesiëmie of -calciëmie
 - hypothermie
 - hypothyroidie
 - dieet (proteïnearm, anorexia nervosa)
- centrale zenuwstelsel - oorzaken
 - CVA
 - subarachnoidale bloedin
- congenitale vorm, soms samengaan met congenitale doofheid
- voorkomen bij kinderen: mogelijkheid bij syncopes na stress of inspanning, hartstilstand of plotse dood. Bij 10% is er een overlijden zonder eerdere symptomen.

2. Diagnose

- anamnese:

- syncopes:
 - in het verleden? ritmestoornissen? aanvallen van tachycardie?
 - familiale gevallen van plotse dood
 - ijlhoofdigheid
 - stuipen
- genetische belasting
 - congenitale doofheid

- familiale syncopes en plotse dood

- medicatiegebruik

- anti-artimica

- antibiotica

- antihistaminica

- psychotropica

- contact met insecticides

- electrocardiogram

- QT-interval: $> 0,44s$ (> 11 kleine vakjes), variabel interval

- breed complex tachycardie (VT, VF of torsades de pointes)

- T-golf afwijkingen: T-golf alterans, bifasische T

- U-golven

- labo

- elektrolieten

- toxicoscreening

- genetisch onderzoek

- echocardio

- uitsluiten andere oorzaken

- ECG stress testen: verlengen van QT-interval

- holtermonitoring

- familiale ECG-testen

3. DD

- acuut myocardinfarct

- kleplijden

- hypertrofische cardiomyopathie

Eerste opvang

- IV lijn
- monitoring
- is de patient stabiel?
 - zo neen: cardioversie ter plaatse
 - zo ja: met torsades de pointes?
 - indien neen :gewoon transport
 - indien ja: magnesiumsulfaat.
 - in bolus 2 gram over 2 minuten. (kind: 25-50mg/kg)
- daarna continu IV 2-4 mg/min

Spoeddienst

- indien torsades de pointes
 - magnesiumsulfaat 2 gr IV over 2 min in bolus (kind 25-50 mg/kg). Daarna 2-4 mg/min in continu IV infuus
 - tijdelijke transveneuze pacing tussen 90 en 110/min
 - indien pacing niet mogelijk is, eventueel Isuprel bij recidieven en bij instabiele patienten.
- correctie van elektrolyetenstoornissen
- stop evtl uitlokkende medicatie
- opname cardiologie voor
 - monitoring
 - tijdelijke transveneuze pacing tussen 90 - 110/min
 - plaatsen van definitieve pacemaker en/of defibrillator
- opstarten hoge dosissen betablokkers ter preventie van ritmestoornissen

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