Empiric Quinidine for Asymptomatic Brugada Syndrome-
Preliminary Results of an International Registry

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No disclosures
Asymptomatic BrS- estimated risk

Percentage of asymptomatic patients with a spontaneous type 1 ECG that experience events (sudden cardiac death, appropriate implantable cardioverter-defibrillator discharge)

Y Mizusawa & AAM Wilde; Circ Arrhythm Electrophysiol 2012
Asymptomatic BrS- risk stratification

Programmed electrical stimulation

Risk Stratification in Brugada Syndrome

Results of the PRELUDE (PRogrammed ELectrical stimUlation preDictive valuE) Registry

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and Vicenza, Italy; and New York, New York
Asymptomatic BrS- risk stratification

Programmed electrical stimulation

Spontaneous type 1 pattern

Type 1 pattern in limb leads

QRS fragmentation

J point elevation

Signal averaged ECG

Exercise test

Repeated ECG

Holter
ICD in BrS- complication rate

<table>
<thead>
<tr>
<th>Study</th>
<th>n</th>
<th>F/U (months)</th>
<th>Reference</th>
</tr>
</thead>
<tbody>
<tr>
<td>AVID</td>
<td>539</td>
<td>38</td>
<td>Kron et al. Am Heart J 2001</td>
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<tr>
<td>Sacher et al.</td>
<td>220</td>
<td>47.5</td>
<td>Circulation 2006</td>
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<tr>
<td>Sarkozy et al.</td>
<td>47</td>
<td>43</td>
<td>Eur Heart J 2007</td>
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<tr>
<td>Rosso et al.</td>
<td>59</td>
<td>76</td>
<td>IMAJ 2008</td>
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<tr>
<td>Miyazaki et al.</td>
<td>41</td>
<td></td>
<td>Am J Cardiol 2013</td>
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Quinidine in BrS - efficacy data

In vitro arrhythmia suppression

ECG normalization in case reports

Alings et al; PACE 2001
Quinidine in BrS- efficacy data

In vitro arrhythmia suppression

ECG normalization in case reports

Prevention of VF induction during EPS
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<td>Prevention of VF induction during EPS</td>
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<tr>
<td>Preventing spontaneous arrhythmias in non-randomized trials</td>
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<td>Effective in VF storm termination</td>
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<td>Quinidine- adverse reactions</td>
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<td>-----------------------------</td>
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<tr>
<td>Diarrhea &amp; GI intolerance ~30%</td>
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<td>Liver toxicity &lt; 1%</td>
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<td>Cytopenia &lt; 1%</td>
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<td>Cinchonism &lt; 1%</td>
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<td>Torsades de Pointes 2-8% (?)</td>
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The Empiric Quinidine for Asymptomatic Brugada Syndrome International Registry

| Asymptomatic patients with type 1 Brugada pattern |
| No evidence of structural heart disease |
| EPS is strongly discouraged |
| Initial dose: 600-900 mg hydroquinidine |
| 48 hrs hospitalization during onset of therapy |
Preliminary results- number of patients

Total: 144
Mean age: 42 (6-75)
Preliminary results

Symptoms
- None: 55%
- Palpitations: 19%
- Chest pain: 8%
- Syncope: 18%

Family history
- Positive: 39%
- Negative: 61%
Preliminary results

Diagnostic ECG

Genetics (n=67)
Preliminary results - quinidine

- None (continued treatment), 15
- Prolonged QT, 2
- Diarrhea, 1
- Asymptomatic liver tests, 1
- Patient’s preference, 1
Preliminary results- follow up

1 adverse event in a mean follow up time of 2.4 years
Thank you

brugadasyndrome.info

Cinchona tree