AJMALINE PROTOCOL

The diagnostic ECG pattern in Brugada Syndrome may be unmasked by Ajmaline. It is a class 1 anti-arrhythmic drug with potent sodium channel blocking effects and a very short half life which makes it a very useful drug for acte intravenous treatments.

DOSE

- 10mg every minute up to a target dose of 1mg/kg of body weight or until end point reached (see below)

ECG RECORDING

The test should be monitored with a continuous ECG recording (a speed of 10 mms⁻¹ can be used throughout the test period, interposed with recordings at 25 or 50 mms⁻¹)

Patient and ECG supervision until normalization of ECG

END POINTS

- Target dose reached
- QRS widens to ≥130% of baseline
- ST segment in type 2 ECG increases by ≥2 mm
- Presence/appearance of the typical Brugada ECG
- Premature ventricular beats or other arrhythmias develop
ADVERSE REACTION

- Urticaria
- Flushing
- Nausea
- Headache

PATIENT PREPARATION

- Patient fasted, rested and in drug free state
- Presence of physician
- Advanced cardiopulmonary life-support facilities available including external defibrillator, intubation set and drugs
- Venous access
- 12 lead standard ECG
- Blood pressure monitoring

CONTRA INDICATIONS

Intravenous sodium channel blockers always should be administered with great caution and infused slowly, closely monitored, and performed in a setting that is fully equipped for resuscitation.

Particular caution should be exercised in patients with a pre-existing atrial or ventricular conduction (or both) disturbance or in the presence of wide QRS, wide P waves, or prolonged PR intervals (i.e. infranodal conduction disease) to avoid the risk of precipitating complete AV block.

Electro-mechanical dissociation has been encountered in isolated cases. Isoprenaline and sodium lactate may be effective antidotes in this setting.
Patients at high risk for drug-induced AV block, such as older adults with syncope, should be administered sodium channel blockers in an electrophysiology study environment after the insertion of a temporary pacing electrode.

For other individuals, especially younger patients, sodium blocker challenge can be safely performed as a bedside test, provided the drug is discontinued as soon as an end point is reached.

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