

WHAT YOU NEED TO KNOW ABOUT BRUGADA SYNDROME IF YOU ARE A HOSPITAL PHARMACIST

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BACKGROUND AND IMPORTANCE

Brugada syndrome (BRS) is a rare inherited heart rhythm disorder characterised by ST-segment elevation and a **potential risk of fatal arrhythmias**. **These channelopathies** are not associated with underlying structural heart disease, making **early diagnosis difficult**.

AIM AND OBJECTIVE

- ✓ Review the literature related to contraindicated drugs in BRS.
- ✓ Create a list to facilitate pharmaceutical validation
- ✓ Compare the list created with the known list of QT-modifying drugs.

MATERIALS AND METHODS

EMBASE and PUBMED were searched for studies using the terms "brugada syndrome" AND "drugs". Only reviews, within the last 5 years and conducted in humans, were included. Information from the *brugadadrugs.org* website was used as a preliminary basis. The *crediblemeds.org* website was also used for the list of QT-modifying drugs.

The medicines were classified according to their level of risk in two groups:

- Contraindicated drugs in BRS (should not be used under any circumstances)
- Potentially hazardous drugs in BRS (with inconclusive data. Use should be evaluated on an individual basis)

RESULTS

Contraindicated drugs in BRS

Ajmaline	Loxapine
Alapinine	Methoxamine
Acetylcholine	Neostigmine
Amitriptyline	Norepinephrine
Bupivacaine	Oxcarbazepine
Clomipramine	Pilsicainide
Desipramine	Pyridostigmine
Dopamine	Procaine
Etacyzine	Procainamide
Ergonovine	Propafenone
Phenylephrine	Propofol
Flecainide	Ropivacaine
Levobupivacaine	Trifluoperazine
Lithium	

Contraindicated and Potentially hazardous drugs in BRS

QT-modifying drugs

Agreement obtained was 29.21%

Potentially hazardous drugs in BRS

Amiodarone	Etomidate	Ondansetron
Atropine	Phenytoin	Nitrous oxide
Bupropion	Fluoxetine	Paroxetine
Carbamazepine	Fluvoxamine	Perphenazine
Cybenzoline	Glycopyrrolate	Propranolol
Cyamemazine	Granisetron	Sevoflurane
Clotiapine	Imipramine	Sugammadex
Desflurane	Indapamide	Terfenadine/fexofenadine
Dexamethasone	Isoflurane	Thiopental
Diphenhydramine	Isoprotenerol	Thioridazine
Dimenhydrinate	Ketamine	Tramadol
Disopyramide	Lamotrigine	Verapamil
Dobutamine	Lidocaine	Vernakalant
Dosulepine	Maprotiline	
Doxepin	Metoclopramide	

CONCLUSION AND RELEVANCE

The low concordance with respect to the list of QT-modifying drugs makes it necessary to define a specific drug list for patients with BRS. This could improve the quality of treatment validation by the hospital pharmacist.

