

DEALING WITH IATROGENIC CARDIAC ARREST IN PSYCHIATRY, DO NOT OVERLOOK MONITORING !

BACKGROUND & PURPOSE

In 2017 a **patient's death** occurred in the psychiatry department of our establishment.



After a **morbidity-mortality review**, the **hypothesis of a cardiac arrest after intake of torsadogenic drugs** has been suggested.

A state of cardiac patient care in our psychiatry units was one of the strategic axes retained to define priority actions of improvement.

MATERIAL AND METHODS

Records of the hospitalized **psychiatry patients** were analyzed **on a given day in April 2018**. Only the factors traced in the patients records **during the first 30 days of hospitalization** were analyzed.



IONOGRAM DATES AND RESULTS

ARTERIAL TENSION (AT)

HEART RHYTHM (HR)



THYROID FUNCTION

A literature review allowed selection of the factors to analyze

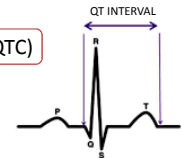
ELECTROCARDIOGRAM REALIZATION

TORSADOGENIC RISK FACTORS (RF)

- female ≥ 65 years
- ischemic heart disease
- torsadogenic drug

CO PRESCRIPTIONS OF PSYCHOTROPIC DRUGS INDUCING QT PROLONGATION (PDIQTP)

CORRECTED QT INTERVAL (QTC)



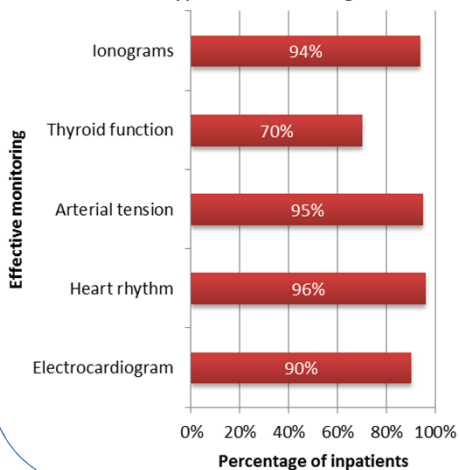
QTC=QTm/√RR'

RESULTS

Ninety-six records were analyzed (100% of inpatients)

AT ADMISSION

Percentage of inpatients depending on the type of monitoring



Monitoring results

- Seven **hypokalemias** were found
- No **hypocalcemia** or **hypothyroidism** were found
- One **hyperthyroidism** was revealed and explored
- Seven **hypertensions** were explored
- No **bradycardia** was recorded
- Four patients had **QtC prolongation** (≥ 450 ms).

Hypokalemias were all adjusted in the first month

Only two (50%) patients with **QtC prolongation** profited of an additional electrocardiogram

44 PDIQTP
17 initiations and 12 raises of torsadogenic drug dosage
extra electrocardiogram in 13% of cases

Half of patients with **one or more risk factors** underwent additional electrocardiogram.

Number and percentage of inpatients according to the number of risk factor

	1 risk factor	> 1 risk factor
Percentage of inpatients	18 (19%)	2 (2%)

CONCLUSION



Main points



- Admission cardiac **check-up** was **mainly realized**.
- Disturbances** admission cardiac check-up was **corrected or explored**.



Points needing improvement



- The **thyroid function** was **underestimated** whereas its disturbance can cause not only cardiac disorders but also psychiatric disorders.
- In **risk situations** that need an extra electrocardiogram during hospitalization (QtC prolongation for example), the **cardiac monitoring** was **insufficient**.



<http://www.eahp.eu/24-CPS-177>

These points needing improvement will be spotlighted in a cardiac monitoring protocol for psychiatry inpatients, in order to prevent iatrogenic cardiac arrests throughout the hospitalization.