IDENTIFY AND PROTOCOLISE TORSADE DE POINTES RISK IN A RESIDENTIAL CENTRE

M. ANTÓN MARTÍNEZ¹, M. GUERRO DE PRADO¹, F. RAMIS RIERA¹, C. ANDRÉS LEDESMA².
¹HOSPITAL UNIVERSITARIO RÍO HORTega, HOSPITAL PHARMACY, VALLADOLID, SPAIN.
²HOSPITAL CLÍNICO UNIVERSITARIO DE VALLADOLID, CLINICAL LABORATORY, VALLADOLID, SPAIN.

BACKGROUND
Torsade de pointes (TdP) is a ventricular tachycardia. The risk of TdP increases when the QT interval is markedly prolonged (>500 msec) or when is combined with other risk factors such as: Bradycardia, females, congenital QT prolongation, age (>65 years), hypokalemia<3,5 mg/dl, hypomagnesemia<1,5 mg/dl and with drugs that prolong the QT.

PURPOSE
To identify the patients at greatest risk to develop TdP and establish a protocol to minimize such risk.

MATERIAL AND METHODS
➢ Prospective observational study: 140 patients were recruited from a residential center.
➢ It was reviewed TdP risk factors described by CredibleMeds®Center for Education and Research on Therapeutics (CERT). Medical history and blood tests for other risk factors.
➢ It was selected patients with one or more drugs from the list “www.QTdrugs.org” in risk of TdP.
➢ Interventions: It is determined the need of the drug and/or possibility of alternative, If schedule period monitoring of the QT interval, potassium and magnesium have been programmed, If the patient recognize the signs or symptoms. We did all analyses using SPSS version 22.0.

RESULTS
Of the 140 residents, 35 were on chronic treatment with one drug on the list, of whom (18=51,4%) Women, (17=48,6%) Men, (33=94%) were ≥65 years old, all patients were between (33-96 years old, mean:84), one with bradycardia and (4=11%) were at high risk. All residents undergo an ECG when they enter the center, potassium levels were between (3.9-5.4meq/L mean= 4.51, SD=0.34). After consultation with the responsible physician in one patient, it would be possible to permanently stop donepezil (one drug on the QT list) due to lack of response, and in the remaining three there was possibility of alternative drug, finally these four patients were scheduled a new ECG.

CONCLUSIONS
Patients at high risk of TdP should be identified for assessing the need or possibility of alternative if there is a prescribed drug in the list, monitoring of the QT interval, potassium and magnesium, considering the list in future prescriptions and train the patient to recognize the alarm sign or symptoms of the arrhythmia.

REFERENCES AND/OR AKNOWLEDGMENTS
www.QTdrugs.org