

april 2016

Reports of cardiac arrest after treatment with methylphenidate

In the beginning of April, the DKMA received an ADR report about a child treated with methylphenidate who went into cardiac arrest. The child's ADHD was adequately managed by Medikinet, and there had been no adverse reactions prior to the event. No signs of trauma were found when the child was hospitalised. The child suffered several episodes of ventricular fibrillation. Long QT syndrome was found, and the child had a pacemaker implanted and was treated with beta blockers.

Doctors should be aware of the following:

- ☒ **Contra-indications for methylphenidate** Pre-existing cardiovascular disorders including severe hypertension, heart failure, arterial occlusive disease, angina, haemodynamically significant congenital heart disease, cardiomyopathies, myocardial infarction, potentially life-threatening arrhythmias and channelopathies (disorders caused by the dysfunction of ion channels).
- ☒ **Pre-treatment screening** Prior to prescribing ADHD medication, it is necessary to evaluate the patient's cardiovascular status, including blood pressure and heart rate. An appropriate medical history must be taken, covering (concomitant) medications, past and present medical and psychiatric disorders or symptoms, family history of sudden cardiac or unexplained death.
- ☒ **Ongoing monitoring of the patient's cardiovascular status** - Blood pressure and pulse should be recorded at each adjustment of dose and then at least every 6 months. - Patients should be informed of symptoms such as palpitations, exertional chest pain, unexplained syncope, dyspnoea or other symptoms suggestive of cardiac disease during medical treatment of ADHD. A patient experiencing any of these symptoms should seek medical advice immediately for evaluation by a cardiologist.

The DKMA is presently obtaining follow-up information to the ADR report for further assessment.