

Journal Watch

Torsade de Pointes Associated with Very-High-Dose Methadone.

Krantz, MJ et al. *Ann Intern Med* 2002; 137:501-504

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Abstract:

Background: Methadone is an effective treatment for opioid dependency and chronic pain. A methadone derivative, levacetylmethadol, was withdrawn from the European market after being associated with torsade de pointes. To date, no association between methadone and this arrhythmia has been described.

Objective: To evaluate a series of methadone-treated patients experiencing torsade de pointes.

Design: Retrospective case series.

Setting: Methadone maintenance treatment programs in the United States and a pain management center in Canada.

Patients: 17 methadone-treated patients who developed torsade de pointes.

Measurements: Chart review for concomitant arrhythmia risk factors and quantification of corrected QT interval (QTc).

Results: The mean daily methadone dose was 397 ± 283 mg, and the mean QTc interval was 615 ± 77 msec. Fourteen patients had a predisposing risk factor for arrhythmia. A cardiac defibrillator or pacemaker was placed in 14 patients; all 17 patients survived.

Conclusions: This series raises concern that very-high-dose methadone may be associated with torsade de pointes. Given the likely expansion of methadone treatment into primary care, further investigation of these findings is warranted.

Comments:

Strengths: Thorough investigation of noted cases suggesting an association. Helpful review of Torsades. Good search for other causes of Torsades in this population. Starting point for further research.

Weaknesses: Only a suggestion of association; further investigation needed. Could not rule out congenital Long QT in these patients. Very specific populations; findings may not apply to palliative patients on very-high-dose methadone.