## Abstract

## Adherence to calcium and vitamin D supplementation in women with postmenopausal osteoporosis

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Introduction: The insufficient medication adherence is a very frequent problem with chronic asymptomatic diseases as osteoporosis which significantly influences the treatment outcome. The successful osteoporosis therapy is based on adequate supply of calcium and vitamin D. A lot of studies are focused on the adherence to antiresorptive treatment but the adherence to supplementation therapy is rarely evaluated.

Aims: The aim of the study was to evaluate the adherence to calcium and vitamin D supplementation in women with postmenopausal osteoporosis.

Methods: The adherence was evaluated using two different methods: self-reported questionnaire and the electronic monitoring by bottles type Medication Event Monitoring System (MEMS). This partial analysis of a multicentre study includes and assesses data from Osteocentre in Pardubice Regional Hospital.

**Results:** The analysis was performed with 15 women (the average age of 73). The patients were treated with Caltrate 600 mg/400 IU D<sub>3</sub> once a day for three months. The adherence during the entire period obtained by questionnaire method was 100%. The adherence during the entire period obtained by method of the electronic monitoring by MEMS bottles reached only 30%.

**Discussion and conclusion:** The adherence to the supplementation was significantly overrated by the patients themselves. The adherence obtained by electronic monitoring was alarmingly low and cannot be considered sufficient. The adherence to calcium and vitamin D supplementation should be observed and evaluated in the future. It is crucial to emphasise the importance of the supplementation treatment and motivate patients to this treatment.