

[P-582E] Accuracy of splitting sertraline tablets

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The Department of Veterans Affairs Medical Centers and managed care organizations have used tablet splitting as a cost containment measure. Lisinopril, citalopram, simvastatin, metoprolol and sertraline are commonly split. If a patient is unable to split tablets, then they are not required to do so. Concern was voiced regarding the accuracy of splitting sertraline tablets. Using a Class I electronic scale (isolated from air movement) and one hundred 100 mg sertraline tablets, 2 people each split 25 tablets using a pill cutter and broke 25 scored tablets by hand. Each tablet was weighed, split and the individual pieces were weighed. The weight of a 100 mg tablet allowed calculation of the amount of sertraline in each section of the split tablets assuming equal distribution throughout the tablet. Using the pill cutter, the dose of sertraline averaged 49.78 mg ($SD \pm 7.37$). Breaking tablets by hand gave an average dose of 49.72 mg ($SD \pm 6.12$). The difference between the weight of the whole tablets and the split tablets was calculated because small tablet fragments were sometimes left over after splitting. This totaled 48.9 mg of sertraline that was lost per 100 tablets (<0.5%). No pieces were destroyed or rendered unusable. The long half life of sertraline overlaps the daily doses and acts to minimize changes in blood levels due to possible variance in the delivered dose. Tablet splitting is an effective tool for medication cost avoidance. If a patient is able to split tablets, this method of reaching the desired dose merits implementation for cost savings.