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# Pros and cons of pill splitting

## May reduce cost and fine-tune therapy, but is it safe?

linicians and patients look to pill splitting to reduce psychotropics' costs and fine-tune pharmacotherapy, but pill splitting has not been rigorously studied for safety or efficacy. It is important to understand the risks and benefits of pill splitting before you recommend the practice to patients.

## PROS OF PILL SPLITTING

Lower costs for patients. Many psychotropics come in multiple strengths, and one larger pill often costs less than 2 smaller pills of equivalent dosage.1 Writing a prescription for a higher dose and instructing the patient to cut the pill in half can lower costs.

Fine-tune titration. Pill splitting allows you to prescribe a lower strength to gradually titrate dosages up or taper them down. This practice can prevent side effects and improve adherence because a lower dose may have a more favorable pharmacokinetic profile.

Improve tolerability. Patients might better tolerate half a pill taken twice daily rather than an entire pill once daily. A smaller dose may prevent a spike in serum level, which could aid tolerability.

### **CONS OF PILL SPLITTING**

**Unequal dosing.** In most instances, pill splitting leads to slightly unequal dosing.<sup>2</sup> This could be a problem if:

• the medication such as lithium has a narrow therapeutic index

## Box Media Questions to ask before you recommend pill splitting

- 1. Will there be a cost saving for the patient?
- 2. Can the patient understand and follow your recommendations?
- 3. Can the patient tolerate minor dosage variability that can occur with pill splitting?
- 4. Is the medication's integrity maintained when the pill is split?

If the answer is yes to all 4 questions, then pill splitting is an option.

- the patient's condition is unstable
- the patient's condition is stable but minor dose variations might cause problems, such as a patient who relapses with small dosing changes.

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continued



## Table

## Appropriate and inappropriate medications for pill splitting

OK to split these formulations	but not these
Adderall tablets	Adderall XR capsules*
Effexor tablets <sup>†</sup>	Effexor-XR capsule*
Paxil or paroxetine tablets	Paxil CR
Prozac 10 mg tablet or fluoxetine tablets	Prozac 20 mg capsule
Risperdal tablet	Risperdal M-TAB
Tegretol	Tegretol XR
Wellbutrin and bupropion tablets	Wellbutrin XL
Zyprexa tablets	Zyprexa Zydis
OK to split	Do not split
Abilify tablets	Concerta capsules
Celexa or citalopram tablets	Cymbalta capsules
Lamictal tablets <sup>†</sup>	Depakote ER
Lexapro tablets	Equetro*
Luvox tablets	Eskalith CR, Lithobid tablets
Remeron or mirtazapine tablets	Geodon capsules
Seroquel tablets	Ritalin LA*
Zoloft tablets	Strattera capsules
* Capsule can be opened and contents sprinkled on food † Tablets may have uneven shapes, making even cuts difficult	

**Slow-release tablets.** Pill splitting is contraindicated if the pill is enterically coated or has a slow-release mechanism that will be compromised if the pill is broken (*Table*).

**Dosage confusion.** With cognitively impaired patients, pill splitting could lead to confusion and possible incorrect dosing.

**Scoring.** Cutting unscored tablets can be difficult, especially if the pills are not round or oval. Because patients can get injured using a knife, recommend pill cutters, which are available at most pharmacies.

**Capsule splitting.** Some psychotropics are sold only in capsules. Some capsules can be opened and sprinkled on food, but splitting the contents into approximately equal dosages can be difficult.

### References

- Cohen CI, Cohen SI. Potential cost savings from pill splitting of newer psychotropic medications. *Psychiatric Services* 2000; 51(4):527-9.
- 2. Teng J, Song CK, Williams RL, Polli J. Lack of medication dose uniformity in commonly split tablets. *J Am Pharm Assoc* 2002;42:195-9.