Benzodiazepine Tapering Strategies and Solutions

Benzodiazepine Information Coalition
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Benzodiazepines are known as "anxiolytics" and are listed as a schedule IV controlled substance. Given that they are not recommended for use beyond 2-4 weeks[1], a benzodiazepine prescription comes with the inherent responsibility of providing patients with an exit strategy. There are those who are fortunate and will have little problem withdrawing from a prescribed benzodiazepine no matter what method of discontinuation they follow. Others, no matter how much they desire to withdraw may experience debilitating mental and physical withdrawal effects. It has been said that benzodiazepines are more "difficult than heroin"[2] to withdraw from.

While it is unclear which patients will be able to successfully withdraw from a benzodiazepine in a few weeks, what is clear, is that those who cannot, may lose years of their life to an unsuccessful taper. It is imperative that doctors and patients are educated about the available methods of tapering. The methods discussed here have been developed through clinical experience and by the thousands of survivors who have successfully completed a benzodiazepine taper.

Common Practice

One common method is to instruct the patient to cut the pill by 1/4 weekly. With this method the patient will be finished tapering in approximately 4 weeks. While some view this as a gradual reduction, many experienced researchers, physicians and patients would consider a 4 week taper to be too rapid. Research has shown that symptoms of dependence are due in part to GABA receptor alteration. Four weeks is often not enough time for these receptors (which are located throughout 70% of the brain and body) to repair, leaving the patient with intolerable symptoms. In fact, this rapid tapering method was found to be ineffective for at least 32-42%[3] of patients who are prescribed benzodiazepines long term, with 90% experiencing withdrawal symptoms.

There are many instances of patients developing a protracted withdrawal syndrome and even seizure disorders from rapid tapers of this nature[4]. Slower, more gradual dose reduction can reduce the severity withdrawal and the risk of protracted acute withdrawal syndrome or PAWS which can last[5] anywhere from 18-24 months or longer.

Patients who are dependent may also have become so severely sensitized to benzodiazepines that even minute fluctuations[5] in dosage can cause terrible suffering. Cutting pills that are not scored to evenly distribute the medication into 4 equal parts exacerbates the severity and fluctuation of symptoms throughout a taper.

Another commonly prescribed method of tapering requires the patient to continuously remove one of the daily doses throughout the week, over the course of several weeks until all doses have been removed. This protocol presents the same problems as with the 1/4 dose reduction per week method. Benzodiazepine Information Coalition has observed throughout years in online support groups representing thousands of patients that this approach more often than not causes a cluster of disabling mental and physical symptoms, which persist for months or years. Additionally, skipping doses means even greater drug serum level fluctuations, instead of a slow, steady decline of drug serum levels often leading to unnecessary pain and suffering.

The Ashton Method and Similar Guidelines

There are other options available to both patients and doctors. As mentioned before, it is often difficult to taper medications that are not designed for gradual reduction. The Ashton protocol recommends using Valium (diazepam) to taper because it comes in much smaller doses and has a longer half life than the newer, shorter acting benzodiazepines. For example, while Klonopin (clonazepam) has a medium half life, the smallest dose available is 0.125 mg, and Xanax (alprazolam) has a short half life, the smallest dose is .25 mg. While these may seem like small doses, when one considers it's equivalence to diazepam, 0.125mg of Klonopin is actually closer to 2.5 mg of diazepam, .25 mg of Xanax is about 5 mg of Valium.

Ashton also recommends[5] tapering no more than 5-10% every 2-4 weeks. This means that, on average, a taper will take about ten months or longer, depending on the patient's starting dose and individual response. As with any recommended guideline it is important to remember that the patient should be allowed to dictate the rate and pace of their taper depending on their individual response to dose reduction. If symptoms are severe and/or disabling, per Ashton, the taper may be suspended for a few weeks until symptoms subside. Oftentimes this resolves the problem and the patient may then resume their taper. It is not uncommon for benzodiazepine tapers to take longer than one might expect due to individual responses. Per Ashton, it matters little whether it takes 6 months or 18 months (or longer) in those who have become dependent due to long term, as prescribed use of benzodiazepines.

While Ashton recommends Valium due to it's long half-life for tapering, other guidelines recommend staying on the originally prescribed benzodiazepine if withdrawal symptoms are tolerable. As with any new medication introduced, there is a risk of adverse reaction. Some patients do not respond well to Valium. Substituting a longer-acting benzodiazepine can take weeks to adjust before patients can begin or resume their taper. This adds more time to what is already perceived as a life-altering and very consuming project. Since benzodiazepine usage and withdrawal often creates numerous complex symptoms, it can be difficult to know if someone is suffering from an adverse reaction to new medication, or is simply symptomatic due to the neuroadaptations caused by long term exposure to benzodiazepines.

Another tricky aspect of switching to a longer acting benzodiazepine is conversion. Ashton created a guide of average conversions[6]. However, unlike opiates, drug equivalences are not studied or mandated by the FDA and every body will be different.

Other issues that should be taken into consideration are the use of other medications to assist in the tapering process such as antidepressants, anticonvulsants, antihistamines and antipsychotics. Currently, there are no FDA-approved medications to alleviate the symptoms of withdrawal. Benzodiazepine Information Coalition's experience from the thousands of

people in benzodiazepine online support groups have found that many patients withdrawing from benzodiazepines develop multiple sensitivities to other medications which seem to aggravate symptoms of withdrawal. With a sufficiently slow, patient-led taper, additional medications are usually not necessary.

Addressing Individual Needs

How does one accomplish a 10% reduction every 2-4 weeks from potent benzodiazepines such as Ativan, Xanax and Klonopin that are not available in very small dosages? For some, substituting the original benzodiazepine in a stepwise fashion over to Valium and making small reductions per the Ashton method is very successful. Some even utilize a jewel scale and razor blade for more accurate dose reductions. However, even these seemingly small cuts can be problematic, particularly for children and adults with seizure disorders. While Valium has the longest half life of any benzodiazepine, it must be remembered that the first metabolites break down after only a few hours. Sensitive patients may benefit from evenly dividing their dose and taking it 2 or 3 times per day.

Those who choose or are required to taper using a shorter-acting benzodiazepine may find it particularly helpful to take their dose several times per day, depending on the half life of the medication. For example, patients taking Klonopin may benefit from dosing 3-4x per day, whereas those taking Ativan may need to dose 4-5x per day. Some patients on Xanax may require 5-6 doses per day just to maintain steady serum levels. Patients who dose at regular intervals are more likely to successfully complete a benzodiazepine taper because they do not experience severe "drops" throughout the day between doses that make discontinuation intolerable. These symptoms are commonly referred to as "interdose" withdrawal.

Tapering Strips

A newcomer to the cessation market is Tapering Strips by Dr. Groot. These can be ordered through the Netherlands. These strips can have a faster taper rate than recommended by Dr. Ashton. We recommend, if utilizing

this option, to consider stabilization strips to slow the taper to 5-10% per month maximum.

Micro-Tapers

Online support communities have developed systems of "micro-tapering" to help distribute medication evenly throughout the day in order to avoid interdose withdrawal symptoms. Micro-tapering uses small daily reductions that add up to a 5-10% overall reduction every month. Daily micro reductions also help to avoid the physical and mental turmoil that larger weekly reductions may create for those who are very sensitive. Keeping track of dose reductions usually requires a daily log, or for some, the use of a spreadsheet.

Oral diazepam solution (Roxane Laboratories) can be a valuable tool in micro-tapering and comes as a stock 5mg/5ml (1mg per ml) solution. Using a syringe, patients can, for example, measure 0.1 mg less of the total dose every day or every 3 or more days. (Of course how much is reduced depends on the individual response of the patient, their starting mg's and rate of desired reduction). For those who cannot tolerate oral diazepam solution, or cannot tolerate diazepam at all, a prescription for a liquid compound of the patient's benzodiazepine can be used.

Suspending vehicles such as "OraPlus" or even almond oil based compounds can be made with crushed pills or the stock powder form of most benzodiazepines. Most compounding pharmacists will have access to a database that will allow them to choose the appropriate suspending agent for each specific benzodiazepine. Liquid compounds in some cases, make it easier for the patient to control the rate of taper and require very little work on their part compared to other tapering methods. If a compounded suspension of a benzodiazepine has been decided upon, it is recommended that a compounding pharmacist associated with the International Academy of Compounding Pharmacists or the Professional Association of Compounding Pharmacists be used due to their extensive knowledge and access to databases which allow them to properly prepare consistent compounded suspensions in the appropriate suspending vehicle.

Finally, there is the method known in the online support community as "liquid titration." Some patients may not tolerate compounded liquids due to multiple factors such as intolerance to the suspending vehicle and/or inconsistencies in the preparation of the compounded suspension. Others may have a difficult time finding a doctor who is willing to prescribe Valium or a prescription for a compounded suspension of their current benzodiazepine. Many who have found themselves in this predicament have successfully tapered on their own by making a homemade suspension in water or milk. A pill is either crushed or allowed to disintegrate in, for example, 300 ml's of liquid. One ml is removed from this suspension and discarded, the rest is ingested. More and more ml's are reduced and discarded each day until nothing is left. This method is less difficult than it sounds and many have successfully tapered on their own using this method.

References

[1]Ashton, H. Drugs (1994) 48: 25. https://doi.org10.2165/00003495-199448010-00004

[2]Quotations. Professor Malcolm H Lader : Quotations & CV. https://www.benzo.org.uk/lader2.htm.

[3]Schweizer MDE. Long-term Therapeutic Use of Benzodiazepines. Archives of General Psychiatry. https://jamanetwork.com/article.aspx?articleid=495123. Published October 1, 1990. Accessed November 29, 2017.

[4]Lader M. Benzodiazepine harm: how can it be reduced? British Journal of Clinical Pharmacology. http://onlinelibrary.wiley.com/doi/10.1111/j.1365-2125.2012.04418.x/full. Published January 22, 2014. Accessed November 29, 2017.

[5]Ashton H. Benzodiazepines: How They Work & How to Withdraw, Prof C H Ashton DM, FRCP, 2002. https://www.benzo.org.uk/manual/index.htm. Accessed November 29, 2017.

[6]Ashton H. Benzodiazepine Equivalence Table. The Ashton Manual. https://www.benzo.org.uk/bzequiv.htm. Accessed November 29, 2017.