Medications and PPS

A Question for Dr. William DeMayo, MD

DeMayo's Q & A Clinic

The following question about the medication Lamotrigine was posted on Facebook:

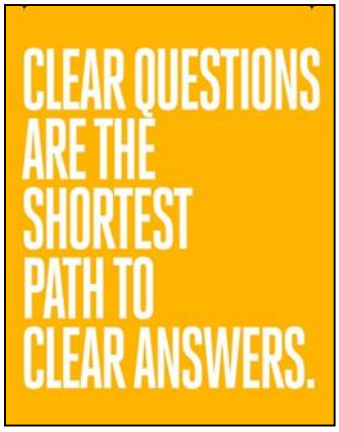
Question: "Lamotrigine is used alone or with other medications to prevent and control seizures. It may also be used to help prevent the extreme mood swings of bipolar disorder in adults." The preceding statement is from WebMD regarding the use of Lamotrigine. Why would an article published by a reputable resource refer to such a drug to help with PPS?

Answer: As with many questions discussed in this column, there can be a "short" answer or more extensive discussion using this issue as a platform for thinking about medications in general. First, the "short" answer…. **There is no clear answer**.

What is clear is that there is no "magic bullet" medication that helps all patients with PPS. Lamotrigine has been studied, but evidence is weak. To be fair, the article referred to above simply states "In addition to prescribing nonsteroidal anti-inflammatory drugs, a trial of Lamotrigine may be helpful" The main research that is usually quoted involves only 30 patients with half (15) receiving medication. Although "significant" benefit was documented, there were many flaws in the study, including;

- Very small size of study group.
- "Control" group did not receive a placebo.
  - When testing medication is important to realize that simply the act of taking medication, even a sugar pill placebo, can generate significant benefits and side effects. It is important that both groups receive either the "test medication" or "placebo" so that any benefit from placebo can be subtracted from the measured benefit of the test medication.
- The duration of the study was quite brief.
- Many other interventions were made during the study. These included education, exercise, orthotics, and weight loss.

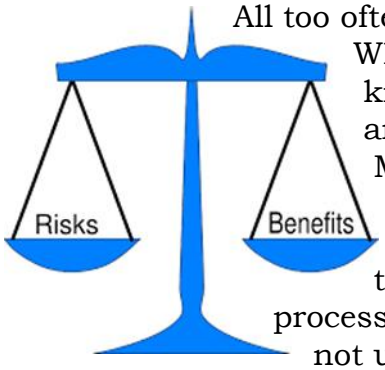
Some of these criticisms are outlined in the last section of the paper itself (from the Journal Neurorehabilitation) which can be viewed HERE. Although the numbers were small and study design was flawed, there was a possible benefit noted. Also, there is some theoretical reason to consider this medication given its effect on presynaptic neurons and mood.



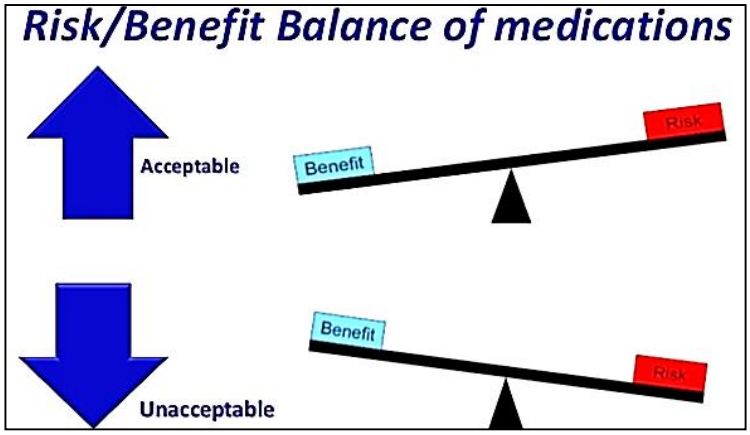
This leads to a more general discussion about the role of medications and when a trial of medications is appropriate. In my opinion, several things should be considered before a trial of medications including:

- What is the specific goal?-"Feeling better" is not a specific goal.
- How will the goal be measured?
  - Numeric pain scale.
  - Functional goal.
  - Other
- What is the specific threshold of improvement that will be used to justify continuation of medication? Examples might include:
  - Reduction of pain from 7/10 to 3/10.
  - Improving endurance to allow individual to prepare a meal without taking a break.
  - Increase ambulation from 1,200 steps per day to 2,000 steps per day on a Fitbit or other activity monitor. (If it is appropriate for the patient to do so).

- What are the specific risks of the medication?
  - Long-term/serious risk to health.
  - Short-term side effects.
    - If any are occurring-should medication be reduced in dose or discontinued by patient?
- Are there non medication ways to achieve the same goals?
  - Exercise.
  - Activity modification
  - Other?



All too often medications are initiated with little or no consideration to the above. When this occurs individuals often end up on multiple medications (also known as "polypharmacy"), resulting in interactions between medications and potential for overall decline in function rather than improvement. Many individuals see this occur in friends and family and take an approach of reject any suggested medication rather than the more rational approach of carefully considering the above questions, and then weighing risks and benefits. This evaluation should be an ongoing process to be sure that medications are providing clear long-term benefit. It is not uncommon for certain problems such as neuropathic pain to "burnout" and medications that were initially beneficial are no longer needed. If dosages are never reduced on a trial basis then one cannot be sure that there is ongoing acceptable benefit. This should be coordinated closely with the prescribing physician with clear parameters for dose adjustments and changes in outcome that would trigger further dose change or discontinuation of medication.



Outside the polio population, there is an epidemic in our society that views narcotics as the answer to pain without looking at the enormous risks involved. I am equally amazed at the number of people that say they do not "believe in medications". In my opinion these individuals are focused on risk and not weighing appropriate benefit. They often are operating from a perspective of fear. The same individual might get diagnosed with severe diabetes, and suddenly "believe" in insulin or be diagnosed with a very curable leukemia and "believe" in taking poison (also known as chemotherapy) in order to save their life. The fact is that most medication decisions are not black-and-white and involve the difficult process of engaging facts on an ongoing basis rather than making more simplistic decisions based on limited information or emotion.

Getting back to our original question regarding Lamotrigine, I applaud the author of the question who dares to ask the question "why?". While in this case the answers are not clear, decisions can be made with a knowledgeable physician, a trial considered, and continuation of the medication can be based on measurable response for the individual. Unfortunately, large randomized controlled trials in the PPS population are not likely to occur and so individualized plans with close monitoring by your physician, as described above, is a rational approach.

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