Effective Health Care
Narcolepsy Treatment
Nomination Summary Document

Results of Topic Selection Process & Next Steps

- Narcolepsy treatment was found to be addressed by existing guidelines from the European Federation of Neurological Societies (EFNS) and from the American Academy of Sleep Medicine. Given that the existing guidelines cover this nomination, no further activity will be undertaken on this topic.
  - Billiard M, Dauvilliers Y, Dolenc-Groselj L, Lammers GJ, Mayer G, Sonka K. Management of Narcolepsy in Adults. In Gilhus NE, Barnes MP, Brainin M, eds. *European Handbook of Neurological Management*. 2nd ed., volume 1. Oxford, UK: Blackwell Publishing Ltd.; 2011: 513-528.
  - Morgenthaler TI, Kapur VK, Brown T, Swick TJ, Alessi C, Aurora RN, Boehlecke B, Chesson AL, Friedman L, Maganti R, Owens J, Pancer J, Zak R, Standards of Practice Committee of the American Academy of Sleep Medicine. Practice parameters for the treatment of narcolepsy and other hypersomnias of central origin. Sleep 2007; 30(12): 1705-11.

Topic Description

Nominator: Individual

Nomination Summary: The nominator asks about optimal treatment options to manage narcolepsy with associated sleep paralysis, particularly among individuals with co-morbid conditions such as hypertension and Raynaud's disease. The nominator is interested in treatment options that carry the least risk of adverse side effects, allowing individuals to function normally in work and school environments as well as to maintain social relationships.

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Population(s): Adults (especially young adults) with narcolepsy; subgroups include those with sleep paralysis and/or those with co-morbid conditions (e.g., hypertension, arrhythmia, Raynaud's disease)

Intervention(s): Stimulants (e.g., methylphenidate, dextroamphetamine sulfate (Dexedrine), dexamphetamine, mazindol (used off-label), methamphetamine, Modafinil (Provigil, Alertec), armodafinil (Nuvigil), sodium oxybate (Xyrem), selegiline (Eldepryl)), anti-depressants (e.g., tri-cyclic antidepressants and SSRIs, venlafaxine, fluoxetine, reboxetine), behavioral interventions (e.g., sleep and nap schedules, avoidance of stimulants such as caffeine) and/or alternative therapies (e.g., light therapy)

Comparator(s): Above interventions alone or in combination

Outcome(s): Adverse effects, including cardiovascular abnormalities (e.g., hypertension and arrhythmia) and headache; daytime sleepiness; sleep paralysis; and return to normal functioning (e.g., ability to drive, work, and maintain social relationships)

Key Questions from Nominator:

1. For patients with narcolepsy and sleep paralysis, is there an effective treatment that won't have bad side effects?

Considerations

- The topic meets EHC Program appropriateness and importance criteria. (For more information, see http://effectivehealthcare.ahrq.gov/index.cfm/submit-a-suggestion-for-research/how-are-research-topics-chosen/.)

- The topic was found to be addressed by two products:

  - The EFNS 2011 clinical practice guideline for the treatment of narcolepsy is a set of evidence-based guidelines that address the full range of treatment options for narcolepsy and associated symptoms of narcolepsy. These guidelines indicate harms associated with the various treatment options and contraindications for individuals with co-morbid conditions.
  - The American Academy of Sleep Medicine 2007 clinical practice guideline for the management of narcolepsy is another set of evidence-based guidelines that addresses treatment of narcolepsy and similar sleep disorders. These guidelines agree with recommendations from EFNS for the optimal treatment of narcolepsy.

- The management of narcolepsy is an active area of research, fueled by recent discoveries regarding the pathophysiology of narcolepsy. Existing guidelines indicate that the management of this condition will likely be evolving in the coming years as new treatment modalities are developed that are designed to intervene at the causal pathway of narcolepsy.