Geriatric Optimization

Megestrol Acetate (Megace®)

WHY IS THIS MEDICATION INAPPROPRIATE?

- Megestrol Acetate (MA) is only approved for AIDS-associated weight loss and is not FDA-approved for appetite stimulation in older adults.
- Use of MA by adults over the age of 65 is associated with[1]:
  - Minimal effect on weight gain or appetite stimulation
  - Deep vein thrombosis
  - Swelling and redness in extremities
  - Sudden difficulty breathing
  - Toxic reactions in those with impaired renal function
  - Death
- In a meta-analysis of 35 trials comparing MA to placebo or to other drug treatments, MA gave only 1 in 12 patients a slight weight improvement of an average of 4 pounds in patients with AIDS, cancer, or an underlying condition compared to placebo, but not to other drug treatments. Additionally, there was no improvement in quality of life or mortality, and **1 in 23 patients** experienced an adverse event leading to death[2].
- Side effects are more common with MA compared to other nutrition methods or drug therapies[3].

APPROACH TO OPTIMIZATION

- Most therapies are for 12 weeks of MA, 480-800 per day, and can be stopped without tapering due to its long half-life[4].
- If treatment is longer than 12 weeks adrenal suppression can occur. If a patient has developed a Cushingoid appearance due to severe adrenal insufficiency, abrupt withdrawal of MA could lead to an Addisonian crisis[4]. To treat the crisis, saline fluids and glucocorticoid replacement therapy should be initiated as soon as possible[6].
- Mirtazapine, cyproheptadine, and dronabinol have been used to improve appetite and weight gain, but also are not approved for older adults and have displayed their own adverse effects as well.

GOAL: Full discontinuation

ADDITIONAL BEST PRACTICES

- Ensure patient evaluation with "Meals on Wheels" to determine treatable causes of weight loss[5]

Meals on Wheels

- **M**edication Effects
- **E**motional problems (e.g., depression, anxiety)
- **A**norexia tardive, Alcoholism
- **L**ate-life paranoia
- **S**wallowing disorders
- **O**ral Factors (e.g., poorly fitting dentures, cavities)
- **N**o money (poverty)
- **W**andering and other dementia-related behaviors
- **H**yperthyroidism, hypothyroidism, hyperparathyroidism, hypoadrenalism
- **E**nteric problems (e.g., malabsorption)
- **E**ating problems (e.g., inability to feed self)
- **L**ow salt, low cholesterol diet
- **S**ocial problems (e.g., isolation, inability to obtain foods)

- Involving dietitians, speech therapists, and social services personnel can be extremely valuable because they can provide many strategies to increase food intake and navigate potential barriers to proper nutrition[3].
- Initiate high protein or high caloric nutritional supplements.
- Consider discussions around palliative care if appetite and weight loss do not improve.

REFERENCES

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3. Huffman G, Evaluating and Treating Unintentional Weight Loss in the Elderly. American Family Physician. 2012, Vol 65. Issue 4.
4. Yeh S, Schuster M. Megestrol Acetate in cachexia and anorexia. *Int J Nanomedicine* 2006. 411-416
5. Morely JE. Undernutrition in older adults. Fam Pract. 2012; 29(suppl 1):89-93
6. Rathburn K, Addisonian Crisis. StatPearls Publishing. July 2021.