

test questions PharmaCE™

To qualify for continuing education credit for this PharmaCE program, you must first enroll. An application form appears on page 2151 of this issue. You may also register online at www.pharmace.com. Once enrolled, complete one or more of the tests below related to the articles in this issue. Mark clearly on the answer sheet the name of the article and the ACPE Universal Program number of the completed test. Send the completed answer sheet to the address below, or to expedite the grading process submit your answers online at www.pharmace.com.

Participants who successfully complete tests will receive credit hours and corresponding CEUs as designated above each test. A statement of credit will then be issued. Tests are valid for credit up to 3 years after the program is published.

Kim Whitney, PharmaCE Manager,
April Salyers, PharmaCE Assistant Manager,
PO Box 42696, Cincinnati, Ohio 45242-0696



PharmaCE is approved by the Accreditation Council for Pharmacy Education as a provider of continuing pharmaceutical education.

Educational Consultants

David A Riley EdD, Chairman, PharmaCE Panel, School of Pharmacy, West Virginia University, Morgantown, WV; Michael C Shannon PhD, Vice-Chairman, PharmaCE Panel, Nicholasville, KY; Ginger G Scott PhD, School of Pharmacy, West Virginia University, Morgantown, WV; Robert B Supernaw PharmD, School of Pharmacy, Wingate University, Wingate, NC.

ACPE Universal Program Number 407-000-05-035-H01 1.0 credit hour (0.1 CEU) Expires: 12/31/08
--

See page 2046.

DRUG-ASSOCIATED WEIGHT GAIN

Goal

To examine literature that identifies weight gain as a significant adverse effect associated with commonly prescribed drug therapies.

Objectives

After reviewing this article, the reader should be able to:

1. identify drugs most likely to cause weight gain;
2. select alternative weight-neutral agents when available;
3. determine the most likely mechanism of drug-induced weight gain for a particular agent;
4. select the best therapy for overweight and obese patients;
5. develop a therapeutic plan to manage drug-induced weight gain.

Test Questions

1. Weight gain associated with medication is:
 - (a) predictable for a particular drug.
 - (b) similar between individuals.
 - (c) common with all long-term therapy.
 - (d) dependent on an individual's baseline weight.
 - (e) a source of intentional nonadherence to therapy.
2. Which of the following atypical or second-generation antipsychotics is most likely to cause weight gain?

- (a) ziprasidone
- (b) clozapine
- (c) aripiprazole
- (d) quetiapine
- (e) risperidone

3. Carbohydrate craving associated with citalopram therapy is thought to be due to interaction with the drug at which of the following receptors?

- (a) norepinephrine
- (b) dopamine
- (c) H₁
- (d) cholinergic
- (e) serotonergic

4. A woman has been taking paroxetine 40 mg daily for 6 months. Although she has noticed a significant improvement in her mood, she is concerned that she has gained 3.6–4.5 kg over that time period. She claims that she has not made any lifestyle changes and wants to change her therapy. Which of the following represents an appropriate alternative?

- (a) imipramine
- (b) nefazodone
- (c) bupropion
- (d) amitriptyline
- (e) fluoxetine

5. A 42-year-old male has been unresponsive to previous antiepileptic therapy. Vigabatrin 2 g daily, started when the patient was hospitalized, was effective in controlling the seizures. After 3 weeks, he was readmitted with an 11-kg weight gain, generalized pitting edema, and symptoms of obstructive sleep apnea. Which of the following is the most likely cause of these signs and symptoms?

- (a) fluid retention
- (b) fat deposition
- (c) increased appetite
- (d) acute respiratory distress syndrome
- (e) cardiotoxicity associated with vigabatrin

6. Based on the information provided below, which of the following statements describing gabapentin-induced weight gain is true?

Dose (mg/day)	Weight Gain (%)
1200–1600	6
>1600–2000	10
>2000	15

- (a) Gabapentin is more likely than vigabatrin to cause weight gain.
- (b) Weight gain with gabapentin is independent of the dose.
- (c) Weight gain with gabapentin depends on the duration of therapy.
- (d) Gabapentin weight gain is dose related.
- (e) Weight gain with gabapentin is more common in females.

7. Improved glycemic control with antidiabetic medication may lead to weight gain due to:

- (a) decreased glycosuria.
- (b) increased glycosuria.
- (c) increased metabolic rate.
- (d) decreased deposition of peripheral fat tissue.
- (e) increased muscle mass.

8. Weight gain in patients with diabetes is more likely to occur when which of the following drugs is added to the treatment regimen?

- (a) metformin
- (b) acarbose
- (c) exenatide
- (d) insulin
- (e) pramlintide

9. Thiazolidinediones are:

- (a) unlikely to cause weight gain when used as single agents.
- (b) associated with fluid retention.
- (c) the least likely antidiabetic medication to cause weight gain.
- (d) known to decrease adipocyte differentiation in peripheral tissue.
- (e) contraindicated in obese patients.

10. A woman has been taking glyburide 10 mg daily for the last 12 weeks. She has gained 3 kg over this time period and reports frequently feeling hungry and hypoglycemic. Which of the following is an appropriate intervention?

- (a) add metformin
- (b) add insulin
- (c) reduce the dose of glyburide
- (d) add repaglinide
- (e) change to glimepiride

11. A woman presented with migraines that were occurring once to twice each month. She has been taking sumatriptan 6 mg during an acute attack with good effect and propranolol 80 mg twice daily for prophylaxis. Her other drug therapy and nutritional supplements include acetaminophen 325 mg twice daily, vitamin C 1000 mg daily, and calcium 1200 mg daily. She has experienced weight gain of 1 kg per month since her last visit. Which of the above treatments is a likely contributor to her weight gain?

- (a) sumatriptan
- (b) vitamin C
- (c) calcium
- (d) propranolol
- (e) acetaminophen

12. Which of the following hormones is a common cause of weight gain?
- usual-dose oral contraceptives
 - low-dose oral contraceptives
 - thyroxine
 - medroxyprogesterone acetate
 - prednisone
13. A man has experienced a 38-kg weight gain with sodium valproate, which has controlled his epilepsy for the first time in years after many treatment failures. What is the most appropriate intervention at this time?
- change therapy to carbamazepine
 - reduce the dose of valproate by 50%
 - start a supervised diet and exercise program
 - add a second weight-neutral antiepileptic agent
 - add a low dose of a diuretic to reduce fluid retention
14. A female patient is 45 kg overweight. She is starting therapy with olanzapine, with a goal dose of 10–15 mg/day at bedtime. Since she is predisposed to weight problems, which of the following would be an appropriate therapeutic plan?
- Tell her that weight gain is possible and you will help her monitor her weight.
 - Do not tell her that olanzapine is associated with weight gain.
 - Tell her that weight gain is likely and nothing can be done about it.
 - Do not mention her weight in any context.
 - Consider clozapine as an alternative therapy.
15. Intentional nonadherence with drug therapy is likely to occur when the:
- perceived benefit is great.
 - adverse effects experienced exceed the benefit.
 - benefit of therapy is clearly explained.
 - patient is fully informed and participates in care.
 - adverse effects are understated.

ACPE Universal Program Number
407-000-05-036-H01
1.0 credit hour (0.1 CEU) Expires: 12/31/08

See page 2056.

ORAL ANTIHISTAMINES FOR ALLERGIC RHINITIS AND CIU

Goal

To present an overview of allergic rhinitis and CIU and their appropriate treatment with antihistamines.

Objectives

After reviewing this article, the reader should be able to:

- distinguish between antihistamines that can cause cognitive impairment and those that do not when reviewing a list of available antihistamine options for allergic rhinitis or CIU;
- identify the most appropriate antihistamine treatment choice and

dosages from a multiple-choice questionnaire when presented with a case study of a patient with allergic rhinitis;

- select the most appropriate antihistamine treatment choices and dosages for CIU, depending on severity, from a list of available antihistamine options.

Test Questions

- In allergic rhinitis, the symptoms of nasal itch, sneezing, and rhinorrhea originate mainly in what system?
 - vascular
 - hormonal
 - lymphatic
 - neural
 - muscular
- What proportion of patients with CIU have autoimmune urticaria?
 - ≤30%
 - ≤40%
 - ≤50%
 - ≤70%
 - ≤90%
- If a patient presents for the first time with allergic rhinitis or CIU, what is the recommended first course of action?
 - avoidance of allergen(s)/precipitating or exacerbating factor(s)
 - immediate treatment with antihistamines
 - immediate treatment with intranasal/topical corticosteroids
 - immediate treatment with immunotherapy/immunosuppressive agents
 - immediate treatment with antileukotrienes
- Recommended therapeutic options in the treatment of allergic rhinitis include which of the following?
 - intranasal corticosteroids
 - H₁-receptor antagonists
 - oral decongestants
 - antileukotrienes
 - All of the above are correct.
- Recommended therapeutic options in the treatment of CIU include which of the following?
 - H₁-receptor antagonists
 - corticosteroids
 - H₂-receptor antagonists
 - antileukotrienes
 - All of the above are correct.
- All of the following agents are first-generation OTC antihistamines except:
 - chlorpheniramine
 - loratadine
 - oxtriprolamine
 - fenpropriamine
 - desloratadine.
- Compared with the first-generation antihistamines, newer-generation agents are best described as:
 - more selective for the H₁-receptor/less likely to bind to cerebral receptors.
 - less selective for the H₁-receptor/more likely to bind to cerebral receptors.
 - more selective for the H₂-receptor/less likely to bind to cerebral receptors.
 - more selective for the H₁-receptor/more likely to bind to cerebral receptors.
- A 42-year-old patient with mild allergic rhinitis is currently taking a first-generation antihistamine. The patient reports good symptom control, but is experiencing sedation. Which of the following alternative treatments would be a good option for this patient?
 - an intranasal corticosteroid
 - another first-generation antihistamine
 - a newer-generation antihistamine
 - an antileukotriene
 - a decongestant
- A 7-year-old child with SAR is being treated with fexofenadine. The recommended dosage in this patient is:
 - 120 mg daily.
 - 60 mg daily.
 - 60 mg twice daily.
 - 30 mg daily.
 - 30 mg twice daily.
- Loratadine 5 mg qd is indicated in children with allergic rhinitis and CIU from which age?
 - 2 y
 - 3 y
 - 4 y
 - 5 y
 - 6 y
- In patients with CIU, H₁-receptor antagonists are most effective for which of the following symptoms?
 - pruritus and flares
 - pruritus and erythema
 - wheals and flares
 - pruritus and wheals
 - wheals and erythema
- For which of the following profiles is a first-generation antihistamine indicated?
 - mild allergic rhinitis/sleeping difficulties
 - mild CIU/no sleeping difficulties
 - moderate to severe allergic rhinitis/sleeping difficulties
 - severe CIU/no sleeping difficulties
 - severe CIU/sleeping difficulties
- In CIU, add-on of which agents may help protect against the vascular effects of the disease?
 - H₂-receptor antagonists
 - H₁-receptor antagonists
 - H₃-receptor antagonists
 - H₄-receptor antagonists
 - immunosuppressives
- The use of OTC first-generation antihistamines has been linked to which of the following?
 - increased work productivity and high healthcare costs
 - increased work productivity and low healthcare costs
 - lost work productivity and high healthcare costs
 - lost work productivity and low healthcare costs
 - lost work productivity and no healthcare costs

VOID