Prevalence of Cachexia (Wasting Syndrome) Diagnosis and Treatment Among Patients with HIV/AIDS: A Medical Claims Database Analysis

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Abstract

Objective: To estimate the prevalence of cachexia diagnosis and treatment among patients with HIV/AIDS.

Methods: Using a large US managed care claims database (approximately 51 million covered lives; 75 plans), we identified all persons who had ≥1 paid claim listing a primary or secondary diagnosis of HIV/AIDS (ICD-9-CM 042) during calendar years 2004-2005. A concomitant diagnosis of cachexia was assumed if the patient also had ≥1 paid claim during this timeframe listing a primary or secondary diagnosis of malnutrition (ICD-9-CM 263.xx), cachexia (ICD-9-CM 799.4), or other related codes (i.e., ICD-9-CM 791.0, 763.2, or 763.3). Pharmacologic treatment of cachexia in these patients was assumed if ≥1 pharmacy claim for megestrol acetate, oxandrolone, somatropin, or dronabinol was paid during the same timeframe.

Results: A total of 23,829 persons had ≥1 claim listing a diagnosis of HIV/AIDS during 2004-2005. Of these, 134 also had a cachexia diagnosis but no treatment, 572 had cachexia treatment but no diagnosis code, and 1,028 had a diagnosis code and treatment among patients with HIV/AIDS.

Cachexia is rapid, involuntary weight loss associated with many acute and chronic conditions, including HIV/AIDS, and it often confers increased morbidity and mortality. Previous rates of AIDS-related cachexia or wasting have been estimated as high as 53% of HIV patients, depending on the definition of cachexia. To our knowledge, there have not been any published estimates of cachexia among patients diagnosed for HIV/AIDS in nationally representative databases.

Study Objective

To estimate the prevalence of cachexia diagnosis and treatment among patients with HIV/AIDS in a nationally representative database.

References


Figure 1. Prevalence rate of cachexia per one-thousand patients diagnosed with HIV/AIDS

Figure 2. Prevalence rate of cachexia per one-thousand patients diagnosed with HIV/AIDS, by age category

Figure 3. Prevalence rate of cachexia per one-thousand patients diagnosed with HIV/AIDS, by gender

Results

A total of 23,829 persons had ≥1 claim listing a diagnosis of HIV/AIDS during 2004-2005:

- Average age was 42 years: 57% were younger than 45 years and 43% were 45+ years of age
- Twenty-eight percent were female
- Overall prevalence of cachexia was estimated at 1,734 persons per 1,000 persons with HIV/AIDS. Higher cachexia prevalence was observed among persons aged 45+ years and men, respectively.

Conclusion: Cachexia is a prevalent comorbid condition among persons with HIV/AIDS. Pharmacologic treatment of cachexia in these patients was assumed if they had ≥1 pharmacy claim(s) during the same calendar year as their HIV/AIDS claim for:

- Megestrol acetate
- Oxandrolone
- Somatropin
- Dronabinol

All study measures are reported descriptively overall, and stratified by age and gender.

Limitations

- Retrospective study design
- Clinical measures (e.g., weight) not available in database which may explain why our estimated rates are somewhat lower than previously published findings
- Lack of definition uniformity for cachexia across general medical practice

Summary and Conclusions

In this nationally-representative managed care database, 7-8% of all persons with HIV/AIDS were cachectic, based on diagnostic and treatment evidence. Approximately 8% of prevalent cachexia cases did not receive an indicated pharmacologic treatment. As many as one-third of prevalent cases (i.e., 572 of 1,734) cannot be ascertained through the use of ICD-9-CM diagnosis codes alone, therefore pharmacologic treatment is also an important marker for cachexia. This is not surprising, insofar as all patients in our sample have a diagnosis of HIV/AIDS and US payers generally require only one diagnosis code to effect claim payment. These findings underscore the importance of considering use of pharmacologic treatment in estimating prevalence of comorbid conditions in persons with chronic diseases.