

Poster presentation

Cost consequences of HIV-associated lipoatrophy

J Hornberger¹, R Rajagopalan^{*2}, A Shewade¹ and M Loutfy³

Address: ¹Cedar Associates LLC, Menlo Park, USA, ²Abbott Laboratories, Abbott Park, USA and ³University of Toronto, Toronto, Canada

* Corresponding author

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Purpose of the study

HIV-associated lipoatrophy may affect up to 35% of patients who have received antiretroviral therapy for more than one year, and results in depression, social isolation, and career barriers. Interventions, such as dermal fillers, are licensed for restoration of facial fat loss in persons living with HIV. As only few insurance plans, if any, provide reimbursement for such procedures, patients must consider the pros and cons of such interventions, weighing these against the other costs of daily life. The primary goal of this study is to provide reliable estimates of the costs of treating HIV-associated lipoatrophy, specifically facial lipoatrophy.

Methods

Costs are estimated from published studies reporting administration patterns of dermal fillers, publicly available list prices, and physician service fees for similar subcutaneous injections of the face. Fourteen studies were identified that reported experience with five dermal fillers used to treat HIV-associated facial lipoatrophy: poly-L-lactic acid, calcium hydroxylapatite, polyalkylimide gel, hyaluronic acid, and silicone oil. Two products, poly-L-lactic acid and calcium hydroxylapatite, are semi-permanent injectable fillers with effect lasting up to 18–24 months and are approved by the FDA. Hyaluronic acid is a temporary filler and the effect would usually last up to a year. Polyalkylimide gel and silicone oil are permanent fillers. Data were collected from these 14 studies on the dosage, treatment schedule, and amount of product administered for each product. Cost of dermal filler for a single site such as malar, is estimated as the product of (i)

the number of visits per course, (ii) units of product used per visit, and (iii) the price per unit of filler.

Summary of results

Typical courses involve four physician visits on average but could vary from one to 13. The unit price for each dermal filler ranges from \$123 for 1 mL of poly-L-lactic acid to \$1,250 for 1 mL of silicone oil. The cost of a course of dermal-filler treatment at a single facial site ranges from \$3,690 to \$16,544, which typically is not covered by the payers. Physician fees for similar outpatient procedures reimbursed by insurers are approximately \$500, and may vary according to location, specialty, and market conditions.

Conclusion

Treatment of HIV-associated lipoatrophy may represent a considerable out-of-pocket expense for many patients and will influence their treatment decisions and care pathways.