Incidence of Lipoatrophy Associated with Autoinjection Versus Manual SQ Injection of Glatiramer Acetate

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OBJECTIVES

- Compare the incidence of lipoatrophy associated with long-term use of autoinjection versus manual SQ injection of glatiramer acetate (GA) in a large clinical practice population of multiple sclerosis (MS) patients.

BACKGROUND

- The prevalence and severity of lipoatrophy with long-term GA therapy is unknown.
- In the GA prescribing information, the incidence of lipoatrophy has been reported as high as 45% in an independent study.
- A heightened risk of lipoatrophy is an inherent feature of autoimmune disease and was substantively higher than previously reported and was often the solitary factor in prompting patients to switch to another MS agent.
- A heightened risk of lipoatrophy is an inherent autoimmune problem and may not necessarily be mitigated by vigilant injection site rotation irrespective of the methodology of GA administration.

METHODS

- A total of 73 MS patients maintained on GA (mean 36 months) were given the option of use of autoject 2 (autoject 2 apparatus was provided through Shared Solutions) versus manual SQ injection.
- 40 patients (54.8%) employed autoinjection and the remaining 33 patients (45.2%) opted for the manual SQ injections.
- Both groups were followed with clinical examination and serial photographs at three month intervals over 3 years.
- All patients were counseled on proper injection site rotation and methods at each visit.

RESULTS

- A total of 46 patients (63%) taking GA developed lipoatrophy over a 3-year interval. Thirty-five (88%) out of the 46 patients developed lipoatrophy with the use of autoject 2.
- Lipoatrophy occurrence was predominantly in women. Multiple injection sites were often involved in the same patient.
- Lipoatrophy was permanent, at times severely disfiguring, and was often associated with psychological impact.
- Four case vignettes of the 35 patients developing lipoatrophy with autoject 2 use are presented along with photographs.

CONCLUSIONS

- Lipoatrophy can be severely disfiguring and is invariably permanent.
- The occurrence of lipoatrophy was highest in the autoinject group, was substantively higher than previously reported and was often the solitary factor in prompting patients to switch to another MS agent.
- Lipoatrophy occurrence was found predominantly in women.
- A heightened risk of lipoatrophy is an inherent autoimmune problem and may not necessarily be mitigated by vigilant injection site rotation irrespective of the methodology of GA administration.

REFERENCES


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The authors have nothing to declare.