Complications of Lipostabil Endovena for Treating Localized Fat Deposits

Patrícia Guedes Rittes, MD

Dr. Rittes is a dermatologist in private practice in São Paulo, Brazil.

Background: *Subcutaneous injection of Lipostabil Endovena (Nattermann & Cie, Köln, Germany) has been used to treat periorbital fat pads, as well as localized fat deposits in the abdomen, neck, arms, and thighs.*

Objecive: *The goal of this article was to identify complications resulting from the use of Lipostabil Endovena for treating fat deposits.*

Methods: *A prospective study was conducted to identify complications associated with injection lipolysis with Lipostabil Endovena. Patients were surveyed at 48 hours, 2 weeks, and 2 months after the last injection session.*

Results: *The 739 patients surveyed received a total of 2852 vials injected. No general symptoms, such as fever, dizziness, gastrointestinal disturbances, or visual disturbances occurred, although local symptoms, including edema, hematoma, pain, and nodules, were reported.*

Conclusions: *The lack of any reported general complications after injection lipolysis with Lipostabil Endovena is encouraging. However, larger studies are needed to confirm that the use of Lipostabil Endovena is safe.* (Aesthetic Surg J 2007;27:146–149.)

The use of Lipostabil Endovena (Nattermann & Cie, Köln, Germany) for treating localized fat deposits has been increasing since 1998. According to the distributor, an estimated 20,000 5-mL vials per month are injected in Brazil.

However, at this time Lipostabil Endovena is not licensed by any regulatory agency for use in cosmetic treatments, and some in the medical community are concerned about its use.[1] These concerns stem in large part from the lack of studies in the medical literature evaluating the efficacy and safety of this product. What is needed is a prospective protocol to evaluate the safety and efficacy of Lipostabil Endovena with respect to treatment objectives. Evaluation of efficacy would include tape measurements to assess the amount of fat reduction, ultrasound examinations to analyze fat volume, and strict weight controls throughout the treatment period. This prospective study was undertaken to evaluate safety by gathering and analyzing data on complications of injection lipolysis with Lipostabil Endovena.

Materials and Methods

A prospective study was conducted for identifying complications of the use of Lipostabil Endovena for the treatment of eye fat pads and localized fat deposits, according to the technique described in 2001 and 2003.[2,3] Patient ages, areas treated, and number of vials for each area are summarized in Table 1. Lipostabil Endovena was injected as follows.

Eyes

A total of 0.4 mL was injected around each eye, including 0.1 mL in the lateral fat pad, 0.1 mL in the internal fat pad, and 0.2 mL in the central fat pad. Patients underwent from 1 to a maximum of 4 injection sessions; sessions were scheduled at 15-day intervals.

Body, arms, and thighs

Five regions were treated—the superior, central, and inferior abdomen, the arms, and the thighs. Within each of these regions, treatment areas defined as 80 cm^2 received a total of 5 mL. Each of these treatment areas received six 0.8-mL injections, spaced 3 cm apart. An additional 0.2 mL was distributed in sites needing additional treatment. Patients underwent from 1 to a maximum of 4 treatments, spaced 2 weeks apart. A maximum of 2 areas were treated in the first session. In other sessions, a maximum of 8 areas were treated, with each area receiving 5 mL, for a total of 40 mL per session.

Table 1. Distribution of treatment areas

Location	Patients	Age (years)	Vials (5 mL)
Face			
	7	<21	12
	29	21-41	46
	138	41-61	220
	31	≥61	51
Total	205		329
Body			
	5	<21	22
	133	21-41	529
	208	41-61	965
	28	≥61	196
Total	374		1712
Arms/legs			
	2	<21	12
	71	21-41	273
	77	41-61	448
	10	≥61	78
Total	160		811
	14	<21	12
	233	21-41	273
	423	41-61	448
	69	≥61	78
Total	739		2852

Patients were followed up by interviews at 48 hours, 2 weeks, and 2 months after the last session. Follow-up focused on general symptoms, such as fever, myalgia, dizziness, gastrointestinal disturbances, visual disturbances, as well as on local symptoms, such as edema, hematoma, pain, and nodules.

Results

No fever, myalgia, dizziness, gastrointestinal disturbances, or visual disturbances were reported in any patient. Pain and edema were reported in the face, body, arms, and thighs by all patients after 48 hours (Figures 1 and 2). They were not reported in the face and decreased significantly in the body and arms and legs after 2 weeks. No pain or edema was present by 2 months after treatment.

The incidence of hematoma at 48 hours and 2 weeks after treatment was highest in the arms and legs (30%), with fewer occurring in the body (20%) and the face (<5%). All hematomas resolved spontaneously by 2 months after treatment (Figure 3). Nodules developed in the body, arms, and legs at 2 weeks after treatment but resolved spontaneously by 2 months after treatment (Figure 4).

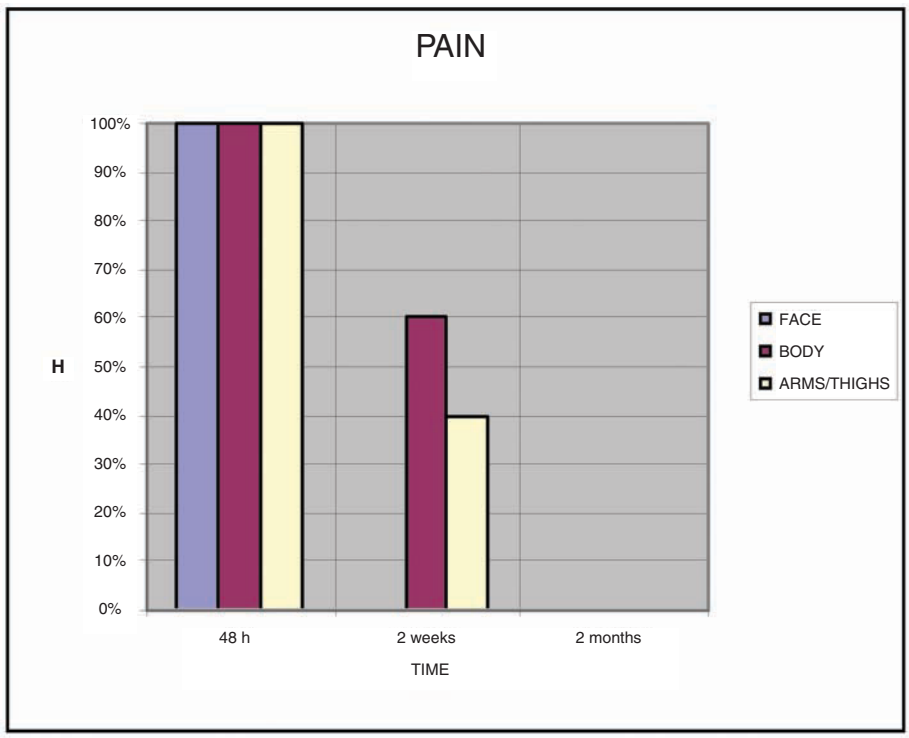

Figure 1. *Incidence of pain at 48 hours, 2 weeks, and 2 months after treatment.*