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Letter to Editor

Calculation of required intravenous fluids in tumescent liposuction

To the Editor

There is no agreement as to appropriate fluid resuscitation in patients undergoing liposuction ¹. Large-volume infiltrations and aspirations may introduce potential complications such as hypovolemia and fluid overload. Hence, this study was designed to determine intravenous fluid replacement in tumescent liposuction.

In this clinical trial study, 50 healthy patients undergoing liposuction using a tumescent technique with sedation were investigated. Our guidelines for fluid resuscitation were as follows ²:

Group I: Volume aspirations ≤4 liters: 4, 2, 1 rule.

Group II: Volume aspirations >4 liters: 4, 2, 1 rule plus 0.25 ml of IV crystalloid per cc of removal after 4 liters.

All patients were monitored preoperatively via monitoring systolic, diastolic and mean arterial blood pressure, pulse rates, respiratory rates and S_aO_2 . Then, these data were analyzed statistically.

Mean absolute value of pulse rates 6 hours after operation was significantly less than mean absolute values before operation. Mean absolute value of S_aO_2 during operation was significantly more than before operation. Mean variations of respiratory rates in patients who underwent volume aspiration equal or less than 4 liters during and after operation were significantly more than the group with aspiratory volume >4 liters.

The results achieved in candidates of tumescent liposuction operation under sedation matched those obtained in patients undergoing liposuction operation with superwet technique by general anesthesia. In this method, however, none of the patients manifested transient hypotension. Heart rates, respiratory rates and S_aO_2 were normal in all patients.

KEY WORDS: Tumescent liposuction, lipectomy, fluid therapy

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