DOSES BELOW

Local anesthetic systemic toxicity (LAST)

START HERE · Stop the local anesthetic
Call for the LAST kit and help. Secure oxygenation and ventilation, limit acidosis and prepare IV 20% lipid emulsion.

↓

Which complication is present?

Seizure →	Use a benzodiazepine per the seizure pathway. Start lipid early for serious toxicity.
Cardiovascular instability or arrest →	Give lipid. If pulseless, start CPR. Use the reduced epinephrine dose below. Avoid vasopressin, beta blockers, calcium-channel blockers and local anesthetics.
Still unstable after initial lipid →	Repeat lipid bolus and double the infusion within the total ceiling. Mobilize bypass or extracorporeal support early.

DOSE AND ADMINISTRATION

20% lipid emulsion · IV loading and infusion Guideline	**Under 70 kg: about 1.5 mL/kg IV over 2-3 min, then 0.25 mL/kg/min. Over 70 kg: about 100 mL IV over 2-3 min, then about 250 mL over 15-20 min.** [9]
Lipid · maximum cumulative volume Guideline	**Total lipid ceiling: 12 mL/kg.** [9]
Epinephrine · LAST modification Guideline	**Adrenaline initial dose below 1 microgram/kg IV.** [9]
Seizure medication Local order	**Benzodiazepine dose per the local seizure protocol and clinician order.** [9]

Reassess and escalate · Continue lipid for more than 15 min after stability. Observe under the ASRA pathway.

Clinical scope · Use the current linked ASRA checklist for the complete sequence, escalation and post-event monitoring. Propofol is unsuitable as replacement lipid emulsion.

Official algorithm

Sources [9] ASRA LAST 2020 • [10] ASRA advisory 2017