

Presumed levobupivacaine-induced cardiac toxicity following psoas compartment block treated with Intralipid

R.Mittal^{*} MBBS, Z. A. Daoud^{*}, FRCA

^{}Department of Anaesthesia, Darlington Memorial Hospital Darlington, DL3 6HX, U.K.*

Corresponding author's address:

Z. A. Daoud, FRCA, Department of Anaesthesia, Darlington Memorial Hospital Darlington, DL3 6HX, E-mail: zaher.daoud@cddft.nhs.uk Phone:+44 1325 743327

Objective: This case report describes delayed presentation of local anaesthetic toxicity following inadvertent vessel puncture and successful resuscitation with lipid rescue.

Case Report: A 76- year-old lady was scheduled for elective total hip replacement. Her medical history included hypertension, type II diabetes mellitus and mild peripheral neuropathy. She received intrathecal block and right posterior lumbar plexus block at L4-L5 level which was complicated by inadvertent vessel puncture. A perineural catheter was left insitu. 25 minutes following lumbar plexus block, she became unresponsive to verbal commands and an ECG detected extreme bradycardia leading to brief asystole with loss of cardiac output.

An immediate presumptive diagnosis of local anesthetic toxicity due to intravenous injection of local anesthetic was made. Resuscitation was commenced, including the administration of 50 mls of 20% Intralipid bolus followed by 450 mls infusion, following which stabilization in patient condition was noted in 5-10 minutes with underlying sinus rhythm.

She regained consciousness and no further cardiovascular or respiratory support was required.

The lady was transferred to a high dependency unit for further care and remained stable.

Eventually she had total hip replacement without cardiovascular incident after 4 weeks under sub-arachnoid block.

Conclusion: The phenomenon of lipid rescue seemed to work well in this case. Lumbar plexus block was complicated with fresh vascular puncture and there after raised intra-compartmental pressure by the application of the hip stabilizers may have enhanced the entry of an unpredictable amount of local anesthetic into intravascular compartment. Following this incident, we believe the volume of local anesthetic should be reduced with in maximum recommended dose or less to avoid accidental local anesthetic toxicity in such scenarios.