

Supplementary file 2 Summary of analysed randomised controlled trials

Author, year (P)	Country of origin	Journal *	Impact factor	Sponsor	Refers to Picard review	Comparison (n° of analysed patients) [data not considered]	Oxford score			
							Randomisation	Blinding	Drop-outs	Total
Adam, 2004	Netherlands	Anesth Analg	3.286	not declared	yes	1. propofol-lipuro 1% MCT/LCT Braun (109) 2. propofol 1% LCT Fresenius mixed with lignocaine (113)	2	1	0	3
Agarwal, 2004	India	Anesth Int Care	1.279	not declared	yes	1. normal saline (31) 2. lignocaine 2% 40 mg (31) 3. ephedrine 30 µg/kg (31)	2	1	0	3
Agarwal, 2004	India	Can J Anesth	2.346	not declared	yes	1. magnesium sulfate 50% 2mL + manual venous occlusion (100) 2. lignocaine 2% 2 mL + manual venous occlusion (100) 3. normal saline + manual venous occlusion (100)	2	1	0	3
Agarwal, 2004 (a)	India	Anesth Analg	3.286	academic	yes	1. normal saline + manual venous occlusion (31) 2. lignocaine 2% 40 mg + manual venous occlusion (31) 3. thiopental 0.25 mg/kg + manual venous occlusion (31) 4. thiopental 0.5 mg/kg + manual venous occlusion (31)	2	1	0	3
Agarwal, 2004 (b)	India	Anesth Analg	3.286	academic	yes	1. normal saline (50) 2. lignocaine 2% 40 mg (50) 3. butorphanol 2 mg (50)	2	1	0	3
Aggarwal, 2011	India	Saudi J Anaesth*	none	none	no	1. 1% propofol 2 ml (20) 2. 0.5% propofol 4 ml (20) 3. 0.33% propofol 6 ml (20)	2	0	0	2
Ahmad, 2008	Malaysia	Med J Malaysia	none	academic	yes	1. fentanyl iv 100 mg and propofol MCT/LCT premixed with lignocaine (85) 2. normal saline and propofol MCT/LCT premixed with lignocaine (85)	2	2	0	4
Ahmed, 2012	India	Indian J Anaesth*	none	none	no	1. granisetron 2 mg + manual venous occlusion (40) 2. normal saline + manual venous occlusion (40)	2	1	0	3
Aldrete, 2009	Argentina	Acat Anaesth Scand	2.188	industry	yes	1. propofol Baxter mixed with NaCl (22) 2. propofol Baxter mixed with lignocaine (22) 3. propofol Gray mixed with NaCl (22) 4. propofol Gray mixed with lignocaine (22)	1	2	0	3
Allford, 2006	UK	Eur J Anaesth	2.231	not declared	yes	1. LCT propofol (60) 2. MCT/LCT propofol (60)	2	2	1	5
Al-Refai, 2007 (P)	Kuwait	Minerva Anesthesiol	2.656	not declared	no	1. remifentanyl 0.25 µg/kg followed by propofol mixed with saline (52) 2. remifentanyl 0.5 µg/kg followed by propofol mixed with saline (51) 3. alfentanil 15 µg/kg followed by propofol mixed with saline (49) 4. alfentanil 20 µg/kg followed by propofol mixed with saline (52) 5. normal saline followed by propofol mixed with lignocaine 1% 1mL (52) 6. normal saline followed by propofol mixed with normal saline (52)	2	1	0	3
Aouad, 2007	Lebanon	Anesth Analg	3.286	academic	yes	1. propofol premixed with lignocaine 2% 40 mg (54) 2. pretreatment with remifentanyl 2 µg/kg (50) 3. combination of both pretreatment with remifentanyl and propofol premixed with lignocaine (52)	2	1	0	3
Apiliogullari, 2007	Turkey	Eur J Anaesth	2.231	not declared	yes	1. normal saline + tourniquet (60) 2. lignocaine 2% 40 mg + tourniquet (60) 3. diphenhydramine 20 mg + tourniquet (60)	1	2	0	3
Ashwani, 2009	India	J Anaesth Clin Pharm*	none	not declared	yes	1. lignocaine 2% + tourniquet (30) 2. thiopentone 0.5 mg/kg + tourniquet (30) 3. tramadol 50 mg + tourniquet (30)	2	2	0	4
Asik, 2003	Turkey	Eur J Anaesth	2.231	academic	no	1. metoprolol 2 mg + manual venous occlusion (30) 2. lignocaine 20 mg + manual venous occlusion (30) 3. normal saline + manual venous occlusion (30)	1	0	0	1
Austin, 2009	UK	J Clin Anesth	1.213	none	yes	1. propofol + 10 mg lignocaine per 20 mL of propofol (51) 2. propofol + 15 mg ephedrine + 0.5 mL of sterile water per 20 mL propofol (51) 3. propofol + 30 mg ephedrine per 20 mL of propofol (54)	2	2	0	4
Ayatollahi, 2012 (R)	Iran	Acta Med Iran	none	academic	no	1. ephedrine 0.1 mg/kg (35) 2. lignocaine 2% (35) 3. ketamine 0.1 mg/kg (35) 4. normal saline (35)	1	1	1	3
Ayoglu, 2007	Turkey	Eur J Anaesth	2.231	not declared	no	1. saline + tourniquet (30) 2. dexmedetomidine 0.25 µg/kg + tourniquet (30) 3. lignocaine 0.5 mg/kg + tourniquet (30) 4. dexmedetomidine 0.25 µg/kg + lignocaine 0.25 mg/kg + tourniquet (30) 5. dexmedetomidine 0.25 µg/kg + lignocaine 0.5 mg/kg + tourniquet (30)	1	2	0	3
Azma, 2004	Japan	Hiroshima J Med Sci	none	not declared	no	1. normal saline (7) 2. thiopental 25 mg (25) 3. thiopental 50 mg (28) 4. thiopental 75 mg (25) 5. thiopental 100 mg (23) 6. lignocaine 40 mg (29)	1	0	0	1
Bachmann-Mennenga, 2007	Germany	Eur J Anaesth	2.231	industry	yes	1. propofol MCT/LCT Braun premixed with lignocaine (112) 2. propofol MCT/LCT Braun alone (112) 3. propofol LCT Disoprivan premixed with lignocaine (111) 4. propofol LCT Disoprivan alone (110)	1	1	1	3
Barbi, 2003 (P)	Italy	Pediatr Anesth	2.100	not declared	yes	1. ketamine 0.5 mg/kg followed by propofol (60) 2. saline followed by mixture of lignocaine 20 mg and propofol (62)	2	2	0	4
Bashir, 2011	India	JK Science*	none	not declared	no	1. propofol alone (30) 2. lignocaine IV + manual venous occlusion followed by propofol (30) 3. tramadol IV + manual venous occlusion followed by propofol (30) 4. normal saline IV + manual venous occlusion followed by propofol (30)	1	0	0	1
Beh, 2002 (P)	Canada	Can J Anesth	2.346	not declared	yes	1. 50% O2 + 50% N2O prior propofol mixed with lignocaine (26) 2. 100% O2 prior propofol mixed with lignocaine (28)	2	1	1	4
Beyaz, 2011 (P)	Turkey	Niger J Clin Pract*	none	none	yes	1. saline + tourniquet prior propofol LCT (30) 2. lignocaine + tourniquet prior propofol LCT (30) 3. saline + tourniquet prior propofol-lipuro MCT/LCT (30) 4. lignocaine + tourniquet prior propofol-lipuro MCT/LCT (30)	1	0	0	1
Beyaz, 2012 (P)	Turkey	J Anaesth Clin Pharm*	none	none	yes	1. propofol LCT (49) 2. propofol MCT/LCT (51)	2	0	0	2
Borazan, 2010	Turkey	Eur J Anaesth	2.231	none	yes	1. paracetamol IV 0.5 mg/kg + tourniquet (50) 2. paracetamol IV 1 mg/kg + tourniquet (50) 3. paracetamol IV 2 mg/kg + tourniquet (50) 4. lignocaine 0.5 mg/kg + tourniquet (50) 5. isotonic saline + tourniquet (50)	2	2	0	4

Borazan, 2012 (P)	Turkey	Int J Med Sci*	2.244	none	yes	1. normal saline before propofol (39) 2. tramadol 1 mg/kg IV before propofol (40) 3. normal saline before a mixture of propofol and lignocaine (40)	2	0	1	3
Brock, 2010	US	J Clin Anesth	1.213	not declared	yes	1. preemptive saline + propofol mixed with lignocaine (20) 2. preemptive lignocaine 2% 4 mL + propofol (20) [3. preemptive saline + etomidate mixed with lignocaine (20)] [4. preemptive lignocaine 2% 4 mL + etomidate (20)]	1	2	0	3
Burimsittichai, 2006	Thailand	J Med Ass Thai	none	not declared	yes	1. lignocaine + tourniquet followed by propofol LCT (90) 2. lignocaine + tourniquet followed by propofol MCT/LCT (90) 3. saline + tourniquet followed by propofol MCT/LCT (90) 4. saline + tourniquet followed by propofol LCT mixed with lignocaine (90)	2	0	1	3
Canbay, 2007	Turkey	Br J Anaesth	4.243	not declared	yes	1. lignocaine 40 mg + pneumatic tourniquet (50) 2. acetaminophene 50 mg + pneumatic tourniquet (50) 3. normal saline + pneumatic tourniquet (50)	2	1	0	3
Chae, 2011	Korea	J Int Med Res	0.896	none	no	1. saline + microemulsion propofol (31) 2. remifentanyl 4 ng/ml + microemulsion propofol (32) 3. remifentanyl 6 ng/ml + microemulsion propofol (32)	2	1	1	4
Chaudhary, 2012	India	J Anesth	0.831	not declared	yes	1. lignocaine 20 mg + tourniquet (30) 2. lignocaine 20 mg + metoclopramide 10 mg + tourniquet (30) 3. lignocaine 20 mg + ketamine 5 mg + tourniquet (30)	2	2	0	4
Cheong, 2002	Korea	Anesth Analg	3.286	not declared	yes	1. normal saline (30) 2. lignocaine 2% 2 mL (30) 3. ephedrine 30 µg/kg (28) 4. ephedrine 70 µg/kg (30) 5. ephedrine 110 µg/kg (30) 6. ephedrine 150 µg/kg (28)	2	2	0	4
Cho, 2010	Korea	Korean J Anesthesiol*	none	not declared	yes	1. saline + propofol stored at room temperature (40) 2. remifentanyl 0.5 µg/kg IV + propofol stored at room temperature (40) 3. saline + cold propofol (40) 4. remifentanyl 0.5 µg/kg IV + cold propofol (40)	2	1	1	4
Chohedri, 2008	Iran	Professional Med J	none	not declared	yes	1. saline + tourniquet prior propofol mixed with 20 mg lidocaine 1% (52) 2. 5 mg metoclopramide + tourniquet prior propofol mixed with saline (75) 3. saline + tourniquet prior propofol mixed with saline (75)	2	2	0	4
Chung, 2011	Korea	Korean J Anesthesiol*	none	not declared	yes	1. normal saline prior microemulsion propofol (20) 2. sufentanyl 0.1 µg/kg prior microemulsion propofol (20) 3. sufentanyl 0.2 µg/kg prior microemulsion propofol (20) 4. sufentanyl 0.3 µg/kg prior microemulsion propofol (20)	2	1	0	3
Davies, 2002	UK	Anaesthesia	2.958	academic	no	1. propofol administered through a 0.2-µm porosity Supor polyethersulphone filter (166) 2. propofol administered without filter (169)	2	1	0	3
Dedic, 2010	Netherlands	Minerva Anesthesiol	2.656	none	yes	1. premedication 1h before: midazolam 7.5 mg, diclofenac 50 mg, acetaminophene 1000 mg + 3 min before: fentanyl IV + propofol premixed with lignocaine 1% 2mL (103) 2. premedication 1h before: normal saline + 3 min before: normal saline + propofol premixed with lignocaine 1% 2 mL (106)	2	1	0	3
De Sousa, 2011	Kuwait	J Anesth	0.831	not declared	yes	1. sevoflurane 3% + lignocaine + tourniquet prior propofol injection (20) 2. sevoflurane 3% + lignocaine premixed with propofol (20) 3. O2 100% + lignocaine + tourniquet prior propofol injection (20) 4. O2 100% + propofol premixed with lignocaine (20) 5. sevoflurane 3% + propofol alone (20)	2	0	0	2
Dubey, 2005	India	Anesth Analg	3.286	not declared	yes	1. propofol-lipuro MCT/LCT (65) 2. lipid-free propofol (Cleofol) (65)	2	2	0	4
Dubey, 2003	India	Clin J Pain	2.813	not declared	yes	1. saline + tourniquet (50) 2. lignocaine 40 mg + tourniquet (50) 3. granisetron 2 mg + tourniquet (50)	2	1	0	3
El-Radaideh, 2007	Jordan	Rev Bras Anesthesiol	0.032	not declared	yes	1. lignocaine + tourniquet (50) 2. lignocaine mixed with fentanyl + tourniquet (50) 3. paracetamol IV + tourniquet (50) 4. saline + tourniquet (50)	2	0	0	2
Erden, 2010	Turkey	Trakya Universitesi Tip Fakultesi Dergisi	0.066	not declared	yes	1. smoker (50) 2. smoker + nicotine gum (50) 3. non smoker (50) 4. non smoker + nicotine gum (50)	1	0	0	1
Erdil, 2007	Turkey	Pain Clinic	none	not declared	no	1. dexmedetomidine 0.6 µg/kg 10 min (50) 2. normal saline 10 min (50)	1	1	0	2
Fahringer, 2010 (P)	US	Pediatr Anesth	2.100	not declared	yes	1. propofol mixed with lignocaine (11:1) (81) 2. propofol mixed with thiopental (3:1) (83)	2	2	0	4
Ghai, 2010	India	J Clin Anesth	1.213	academic	no	1. normal saline + tourniquet (50) 2. parecoxib 20 mg + tourniquet (50) 3. parecoxib 40 mg + tourniquet (50)	2	2	0	4
Goel, 2005	India	J Anaesth Clin Pharm*	none	not declared	no	1. lignocaine 60 mg + tourniquet (20) 2. tramadol 50 mg + tourniquet (20) 3. ketorolac 10 mg + tourniquet (20) 4. ketoprofen 10 mg + tourniquet (20) 5. normal saline + tourniquet (20)	1	2	0	3
Grauers, 2002	Sweden	Acat Anaesth Scand	2.188	academic	yes	1. 1st bolus of propofol over 2 s, followed 2 min later by a 2nd bolus over 10 s (15) 2. 1st bolus of propofol over 10 s, followed 2 min later by a 2nd bolus over 2 s (15)	1	0	0	1
Han, 2010	Korea	Korean J Anesthesiol*	none	not declared	no	1. remifentanyl 0.5 µg/kg followed by microemulsion propofol (40) 2. microemulsion propofol premixed with lignocaine 40 mg (40) 3. remifentanyl followed by microemulsion propofol premixed with lignocaine (40)	2	1	0	3
Harmon, 2003	Ireland	Eur J Anaesth	2.231	not declared	yes	1. control: preoxygenation with 100% O2 (45) 2. preoxygenation with 50% N2O in oxygen (45) 3. preoxygenation with 100% O2 + propofol premixed with lignocaine (45)	2	0	0	2
Hellier, 2003	Australia	Anaesthesia	2.958	not declared	yes	1. propofol with no filter (40) 2. filter for drawing up only (39) 3. filter for drawing up and injection (39)	2	0	0	2
Honarmand, 2008	Iran	Acute Pain	none	not declared	yes	1. magnesium sulfate 2.48 mmol (50) 2. ketamine 10 mg (50) 3. lignocaine 30 mg (50) 4. normal saline (50)	2	2	0	4
Honarmand, 2008	Iran	Clin Drug Investig	1.822	none	yes	1. sufentanyl 0.01 mg (20) 2. remifentanyl 0.01 mg (20) 3. remifentanyl 0.02 mg (20) 4. normal saline (20)	2	1	0	3

Huang, 2002	Taiwan	Acat Anaesth Scand	2.188	not declared	yes	1. normal saline without tourniquet (30) 2. ketorolac 10 mg + tourniquet 30 s (30) 3. ketorolac 10 mg + tourniquet 60 s (30) 4. ketorolac 10 mg + tourniquet 120 s (30) 5. ketorolac 15 mg without tourniquet (30) 6. ketorolac 30 mg without tourniquet (30)	2	0	0	2
Hwang, 2010	Korea	Korean J Anesthesiol*	none	not declared	yes	1. lignocaine 40 mg + tourniquet (42) 2. ketamine 25 mg + tourniquet (41) 3. lignocaine 40 mg and ketamine 25 mg + tourniquet (39)	1	1	1	3
Ishiyama, 2006	Japan	J Clin Anesth	1.213	not declared	no	1. clonidine PO + ephedrine IV (50) 2. clonidine PO + saline IV (50) 3. diazepam PO + ephedrine IV (50) 4. diazepam PO + saline IV (50)	1	0	0	1
Iwata, 2009	Japan	J Anesth	0.831	not declared	no	1. saline (15) 2. ketamine 0.5 mg/kg (15) 3. ketamine 1 mg/kg (15)	2	0	0	2
Iyilikci, 2004	Turkey	J Clin Anesth	1.213	not declared	no	1. alfentanil 1 mg (43) 2. remifentanil 0.01 mg (43) 3. remifentanil 0.02 mg (45) 4. saline (44)	2	0	0	2
Jeon, 2012	Japan	J Anesth	0.831	academic	yes	1. lignocaine 20 mg + tourniquet (30) 2. lignocaine 20 mg and nitroglycerin 0.1 µg/kg + tourniquet (30) 3. normal saline + tourniquet (30)	2	2	0	4
Kaabachi, 2007 (P)	Tunisia	Pediatr Anesth	2.100	none	yes	1. mixture propofol and ketamine 10 mg (58) 2. mixture propofol and lignocaine 20 mg (58)	2	1	1	4
Kam, 2004	UK	Anaesthesia	2.958	industry	yes	1. propofol-lipuro 1% mixed with lignocaine 10 mg (98) 2. propofol LCT Diprivan 1% mixed with lignocaine 10 mg (98)	2	1	1	4
Kaya, 2006	Turkey	Pain Clinic	none	not declared	yes	1. normal saline + tourniquet (50) 2. lignocaine 0.5 mg/kg + tourniquet (50) 3. esmolol 0.5 mg/kg + tourniquet (50)	2	1	1	4
Kaya, 2008	Turkey	Curr Ther Res Clin Exp	0.333	not declared	yes	1. lignocaine with sham tourniquet (20) 2. lignocaine + tourniquet 15 sec (20) 3. lignocaine + tourniquet 30 sec (20) 4. lignocaine + tourniquet 60 sec (20) 5. saline with sham tourniquet (20)	2	2	0	4
Khezri, 2011 (R)	Iran	Acta Anaesthesiol Taiwan	none	not declared	yes	1. lignocaine 0.5 mg/kg (33) 2. ephedrine 30 mg/kg (33) 3. ephedrine 70 mg/kg (33) 4. ephedrine 30 mg/kg + lignocaine 0.5 mg/kg (33) 5. saline (33)	2	2	1	5
Kim, 2010	Korea	Korean J Anesthesiol*	none	academic	no	1. microemulsion propofol and saline admixture (40) 2. microemulsion propofol, saline and 20 mg lignocaine admixture (40) 3. microemulsion propofol, saline and 30 mg lignocaine admixture (40) 4. microemulsion propofol, saline and 40 mg lignocaine admixture (40)	1	0	0	1
Kim, 2011	Korea	Korean J Anesthesiol*	none	academic	yes	1. lignocaine + tourniquet (30) 2. touch on IV injection site of propofol (30) 3. lignocaine + tourniquet + touch on IV injection site of propofol (30) 4. normal saline + tourniquet (30)	1	0	1	2
Kirdemir, 2002	Turkey	Gulhane Med J	none	not declared	no	1. NaCl + tourniquet (20) 2. cold propofol 4° (20) 3. remifentanil 0.5 µg/kg + tourniquet (20) 4. alfentanil 1 mg + tourniquet (20) 5. tramadol 50 mg + tourniquet (20) 6. ondansetron 4 mg + tourniquet (20) 7. lignocaine 40 mg + tourniquet (20) 8. metoclopramide 10 mg + tourniquet (20)	1	1	0	2
Kodaka, 2007	Japan	J Clin Anesth	1.213	not declared	no	1. normal saline + Intralipid prior propofol LCT (50) 2. normal saline + Intralipid prior propofol MCT/LCT (50) 3. priming dose of propofol LCT followed by induction dose of propofol LCT (50) 4. priming dose of propofol MCT/LCT followed by induction dose of propofol MCT/LCT (50)	2	2	1	5
Koo, 2006	Korea	Anesth Analg	3.286	not declared	yes	1. normal saline 2 mL (30) 2. lignocaine 2% 2 mL (30) 3. ketamine 10 µg/kg (30) 4. ketamine 50 µg/kg (30) 5. ketamine 100 µg/kg (30) 6. ketamine 100 µg/kg 3 min before injection of propofol (30) 7. ketamine 100 µg/kg premixed with propofol (30) 8. midazolam (30)	1	2	0	3
Krobbuaban, 2005	Thailand	J Med Ass Thai*	none	none	yes	1. NaCl + standard propofol (97) 2. lignocaine + standard propofol (96) 3. NaCl + small particle size lipid emulsion propofol (Anepol®) (97) 4. lignocaine + small particle size lipid emulsion propofol (Anepol®) (97)	2	2	1	5
Krobbuaban, 2008	Thailand	J Med Ass Thai*	none	academic	yes	1. propofol (MCT/LCT) mixed to saline (135) 2. propofol (MCT/LCT) mixed to lignocaine 20 mg (133)	2	2	1	5
Kunitz, 2004	Germany	AINS	0.413	not declared	yes	1. saline tourniquet + propofol-LCT (20) 2. saline tourniquet + propofol-MCT/LCT (20) 3. lignocaine 2% tourniquet + propofol-LCT (20) 4. lignocaine 2% tourniquet + propofol-MCT/LCT (20)	1	2	0	3
Kwak, 2007	Korea	Clin Drug Investig	1.822	none	yes	1. lignocaine 20 mg + tourniquet followed by saline 2 mL (42) 2. saline 2 mL + tourniquet followed by remifentanil 0.3 µg/kg (42) 3. lignocaine 20 mg + tourniquet followed by remifentanil 0.3 µg/kg (43)	2	2	0	4
Kwak, 2007	Korea	Eur J Anaesth	2.231	academic	yes	1. saline followed by propofol premixed with lignocaine (45) 2. remifentanil followed by propofol (45) 3. remifentanil followed by propofol premixed with lignocaine (46)	2	2	0	4
Kwak, 2008	Korea	Clin Ther	2.321	none	yes	1. lignocaine 20 mg 4 mL + venous occlusion (35) 2. dexamethasone 6 mg + venous occlusion (35) 3. lignocaine 20 mg and dexamethasone 6 mg + venous occlusion (35) 4. normal saline 4 mL + venous occlusion (35)	2	2	0	4
Kwak, 2009 (P)	Korea	Br J Anaesth	4.243	academic	yes	1. alfentanil 15 µg/kg followed by propofol premixed with saline (40) 2. normal saline followed by propofol premixed with lignocaine (39) 3. alfentanil followed by propofol premixed with lignocaine (39)	2	1	0	3
Kwon, 2012 (R)	Korea	Dig Dis Sci	2.117	academic	no	1. lignocaine 1% 2 mL + tourniquet (61) 2. saline 2 ml + tourniquet (60)	2	2	0	4
Lee, 2004	Australia	Anesth Int Care	1.279	not declared	yes	1. lignocaine 1% 4 mL + tourniquet followed by propofol premixed with saline (50) 2. saline 4 mL + tourniquet followed by propofol premixed with lignocaine (50)	1	2	0	3

Lee, 2007	Korea	Br J Anaesth	4.243	academic	yes	1. normal saline (31) 2. remifentanyl 2 ng/mL (32) 3. remifentanyl 4 ng/mL (32) 4. remifentanyl 6 ng/mL (31)	2	2	1	5
Lembert, 2002 (P)	France	Ann Fr Anesth Reanim	0.838	not declared	yes	1. inhalation 50% N2O + 50% O2 followed by propofol (24) 2. inhalation 100% O2 followed by lignocaine mixed with propofol (24)	1	0	0	1
Liljeroth, 2005	Sweden	Acat Anaesth Scand	2.188	academic	yes	1. Diprivan followed 5 min later by Propofol-lipuro (34) 2. Propofol-Lipuro followed 5 min later by Diprivan (39)	1	2	0	3
Liljeroth, 2007 (a)	Sweden	Acat Anaesth Scand	2.188	academic	yes	1. first injection of propofol + tourniquet (160 mmHg) followed 10 min later by a second injection of propofol with placebo venous occlusion (100 mmHg) (75) 2. first injection of propofol with placebo venous occlusion (100 mmHg) followed 10 min later by propofol + tourniquet (160 mmHg) (75)	2	2	0	4
Liljeroth, 2007 (b)	Sweden	Acat Anaesth Scand	2.188	academic	yes	1. 0.5 ml of NaCl followed by 2.0 mL of propofol in one cannula, and then 0.5 mL of low dose propofol followed by 2.0 mL of propofol in the other cannula (41) 2. 0.5 mL of low dose propofol followed by 2.0 mL of propofol in one cannula, and then 0.5 mL of NaCl followed by 2.0 mL of propofol in the other cannula (36)	2	2	0	4
Madenoglu, 2003	Turkey	Curr Ther Res	0.333	not declared	yes	1. propofol (30) 2. propofol premixed with lignocaine 10 mg (30) 3. lignocaine 10 mg IV before propofol (30) 4. lignocaine 1mg/kg IV before propofol (30)	1	0	0	1
Mallik, 2007	UK	Eur J Anaesth	2.231	industry	yes	1. Diprivan propofol 1% (LCT emulsion) (82) 2. Lipuro propofol 1% (MCT/LCT emulsion) (81) 3. Diprivan 1% with lignocaine 40 mg (82) 4. Lipuro propofol 1% with lignocaine 40 mg (81)	2	1	0	3
Massad, 2006	Jordan	Saudi Med J	0.520	not declared	no	1. propofol 1% (50) 2. propofol 1% premixed with lignocaine 40 mg (50) 3. lignocaine 40 mg without venous occlusion (50) 4. lignocaine 40 mg with 1 min tourniquet (50)	2	0	0	2
Massad, 2008	Jordan	Saudi Med J	0.520	none	yes	1. lignocaine + venous occlusion 15 s (50) 2. lignocaine + venous occlusion 30 s (50) 3. lignocaine + venous occlusion 60 s (50)	2	0	0	2
McCluskey, 2003	UK	Anesth Analg	3.286	not declared	yes	1. placebo cream followed by propofol premixed with saline (30) 2. EMLA cream followed by propofol premixed with saline (30) 3. placebo cream followed by propofol premixed with lignocaine (30)	2	1	0	3
Memis, 2002	Turkey	Anesth Analg	3.286	not declared	no	1. IV magnesium sulfate 2.48 mmol (50) 2. IV normal saline (50)	1	2	0	3
Memis, 2002	Turkey	Eur J Anaesth	2.231	not declared	no	1. tramadol 50 mg + tourniquet (50) 2. ondansetron 4 mg + tourniquet (50)	2	2	0	4
Minogue, 2005	Canada	Anesth Analg	3.286	not declared	yes	1. benzyl alcohol (bacteriostatic saline) followed by propofol (39) 2. saline followed by lignocaine mixed to propofol (42) 3. normal saline followed by propofol (39)	2	1	0	3
Mohite, 2010	India	J Anaesth Clin Pharm*	none	not declared	yes	1. propofol premixed with lignocaine Lignofol® (86) 2. lipid propofol emulsion Propovan® (50)	1	0	0	1
Mohta, 2004	India	Anesth Int Care	1.279	not declared	no	1. diclofenac 25 mg (40) 2. diclofenac 15 mg (40) 3. normal saline (40)	2	0	0	2
Niazi, 2005	Ireland	Eur J Anaesth	2.231	not declared	yes	1. lignocaine 0.5 mg/kg IV + tourniquet with oxygen/air (33) 2. saline IV + tourniquet with oxygen/N2O (33) 3. lignocaine 0.5 mg/kg IV + tourniquet with oxygen/N2O (33)	2	2	0	4
Nishiyama, 2005	Japan	J Anesth	0.831	not declared	yes	1. flurbiprofen 50 mg followed immediately by propofol LCT (50) 2. flurbiprofen 50 mg followed 1 min later by propofol LCT (50) 3. lignocaine 40 mg followed immediately by propofol LCT (50) 4. propofol LCT alone (50) 5. propofol MCT/LCT alone (50)	2	0	0	2
Nyman, 2005 (P)	Sweden	Br J Anaesth	4.243	not declared	yes	1. MCT/LCT propofol (Propofol-Lipuro) (42) 2. LCT propofol (Diprivan) premixed with lignocaine (41)	1	2	1	4
Nyman, 2006 (P)	Sweden	Br J Anaesth	4.243	industry	yes	1. Etomidate-Lipuro 2 mg (40) 2. propofol-Diprivan 20 mg mixed with lignocaine 2 mg (40)	2	2	0	4
Ohmizo, 2005	Japan	Can J Anesth	2.346	not declared	no	1. 1.5 mg/kg 1% propofol emulsified in 10% LCT (Diprivan) (102) 2. 1.5 mg/kg 1% propofol emulsified in 10% LCT/MCT (98)	1	0	0	1
Ozkoçak, 2005	Turkey	Eur J Anaesth	2.231	not declared	yes	1. ephedrine 70 µg/kg + tourniquet (25) 2. ketamine 0.5 mg/kg + tourniquet (25) 3. normal saline + tourniquet (25)	2	1	0	3
Oztekin, 2011	Turkey	Turkiye Klinikleri Tip Bilimleri Dergisi*	0.102	not declared	yes	1. remifentanyl followed by propofol 1% 1mg/kg mixed with saline (Fresenius 1%) (25) 2. remifentanyl followed by propofol 2% 1mg/kg mixed with saline (Fresenius 2%) (25) 3. remifentanyl followed by propofol 1% 1mg/kg mixed with lignocaine 2 ml 2% (25) 4. remifentanyl followed by propofol 2% 1mg/kg mixed with lignocaine 2 ml 2% (25)	2	1	0	3
Pang, 2002	Taiwan	Acta Anaesthesiol Sinica	none	not declared	no	1. neostigmine methylsulfate 0.5 mg + tourniquet (35) 2. lidocaine 2% + tourniquet (35) 3. normal saline + tourniquet (35)	1	2	0	3
Pollard, 2002 (P)	Canada	Can J Anesth	2.346	none	yes	1. propofol 1% 5 mg/kg mixed with lignocaine 2% 1 mg/kg (63) 2. propofol 1% 3 mg/kg mixed with thiopentone 2.5% 3 mg/kg (64)	2	2	0	4
Rochette, 2008 (P)	France	Br J Anaesth	4.243	not declared	yes	1. LCT propofol (propofol 1%, Fresenius) with saline (38) 2. LCT propofol with lignocaine (41) 3. MCT/LCT propofol (Propofol-Lipuro) with saline (39) 4. MCT/LCT propofol with lignocaine (42)	2	2	1	5
Rodrigues, 2012	Brazil	Rev Bras Anesthesiol	0.032	industry	yes	1. lipid emulsion propofol (75) 2. nanoemulsion propofol (75)	1	0	0	1
Saadawy, 2007	Egypt	Middle East J Anesthesiol	none	not declared	yes	1. ketamine 0.4 mg/kg + tourniquet (25) 2. thiopental 0.5 mg/kg + tourniquet (25) 3. meperidine 0.5 mg/kg + tourniquet (25) 4. lignocaine 2% 1mg/kg + tourniquet (25) 5. normal saline + tourniquet (25)	1	2	0	3
Salman, 2011	Turkey	J Clin Anesth	1.213	not declared	yes	1. 50 mg methylene blue + tourniquet (30) 2. 40 mg lignocaine + tourniquet (30) 3. normal saline + tourniquet (30)	2	2	0	4
Saritas, 2012	Turkey	Kuwait Med J*	0.051	not declared	yes	1. saline (40) 2. sufentanyl 0.5 µg (40) 3. sufentanyl 1 µg (40) 4. sufentanyl 2 µg (40)	1	0	0	1
Schaub, 2004	Switzerland	Anesth Analg	3.286	not declared	yes	1. lignocaine 40 mg + tourniquet prior standard propofol (95) 2. NaCl + tourniquet prior injection of propofol-LCT/MCT (92)	2	2	1	5
Sen, 2009	Turkey	Anatolian Journal of Clinical Investigation	none	not declared	no	1. propofol 10 mg/mL (solution with 1%, Fresenius) (50) 2. propofol 20 mg/mL (solution with 2%, Fresenius) (50)	1	1	0	2

Sen, 2009	Turkey	Turkiye Klinikleri Tıp Bilimleri Dergisi*	0.102	not declared	yes	1. propofol 10 mg/ml alone (50) 2. propofol 10 mg/ml with lignocaine 2 mg/ml (50) 3. propofol 5 mg/ml alone (50) 4. propofol 2.5 mg/ml alone (50)	1	1	0	2
Sethi, 2009	India	Middle East J Anesthesiol	none	not declared	yes	1. propofol-MCT/LCT premixed with normal saline (100) 2. propofol-MCT/LCT premixed with 20 mg lignocaine (100) 3. propofol-LCT premixed with 20 mg lignocaine (100)	2	1	0	3
Sharpe, 2002	UK	Eur J Anaesth	2.231	not declared	no	1. sham iontophoresis followed by propofol mixed with lignocaine (30) 2. active iontophoresis of lignocaine followed by propofol mixed with saline (30)	2	1	1	4
Shimizu, 2011	Japan	J Clin Anesth	1.213	not declared	yes	1. normal saline + tourniquet, propofol at a rate of 3.3 mg/sec (30) 2. lidocaine 0.5 mg/kg + tourniquet, propofol at a rate of 3.3 mg/sec (30) 3. lidocaine 1.0 mg/kg + tourniquet, propofol at a rate of 3.3 mg/sec (30) 4. normal saline + tourniquet, propofol at a rate of 50 mg/sec (30)	2	0	0	2
Sim, 2009	Korea	Br J Clin Pharmacol	2.958	industry	yes	1. propofol in a microemulsion (Aquafof®) (76) 2. propofol in a lipid emulsion (Diprivan®) (71)	1	0	1	2
Singh, 2009	India	J Med Society*	none	not declared	no	1. lignocaine 25 mg + tourniquet (50) 2. tramadol 50 mg + tourniquet (50) 3. meperidine 25 mg + tourniquet (50) 4. normal saline + tourniquet (50)	1	1	0	2
Singh, 2011	India	Saudi J Anaesth*	none	not declared	no	1. IV magnesium sulfate + tourniquet (25) 2. IV granisetron + tourniquet (25) 3. IV nitroglycerine + tourniquet (25) 4. normal saline + tourniquet (25)	2	0	0	2
Sinha, 2005	India	Anesth Int Care	1.279	not declared	yes	1. propofol premixed with lignocaine 40 mg with oxygen/N2O (30) 2. propofol mixed with saline with oxygen/N2O (30) 3. propofol premixed with lignocaine 40 mg with oxygen/air (30)	2	2	1	5
Soltész, 2007 (P)	Germany	Anesthesiology	5.359	industry	yes	1. 0.5% propofol in a MCT/LCT emulsion (30) 2. 1.0% propofol in a MCT/LCT emulsion (30)	2	1	1	4
Sun, 2005	China	Anesth Analg	3.286	academic	yes	1. propofol LCT Diprivan® (30) 2. propofol MCT/LCT Propofol-Lipuro® (30)	1	2	0	3
Sundarathiti, 2007	Thailand	J Med Ass Thai*	none	not declared	yes	1. propofol LCT 1% (55) 2. propofol MCT/LCT 1% (55)	2	2	0	4
Suzuki, 2006	Japan	Acat Anaesth Scand	2.188	not declared	yes	1. propofol LCT Diprivan® (23) 2. propofol LCT/MCT Propofol Maruisi® (22)	1	0	1	2
Tariq, 2006	Pakistan	JPMI*	none	not declared	no	1. propofol administered in a small vein on dorsum of hand (50) 2. propofol mixed with lignocaine administered in a small vein on dorsum of hand (50) 3. propofol administered in a large vein in the antecubital fossa (50) 4. propofol mixed with lignocaine administered in a large vein in the antecubital fossa (50)	2	0	0	2
Tariq, 2010	Pakistan	JPMI*	none	not declared	yes	1. propofol LCT Diprivan® premixed with lignocaine (100) 2. propofol MCT/LCT Propofol-Lipuro® premixed with normal saline (100) 3. propofol MCT/LCT Propofol-Lipuro® premixed with lignocaine (100)	1	0	0	1
Telletxea, 2008	Spain	Ambul Surg	none	not declared	yes	1. LCT-propofol (65) 2. MCT/LCT-propofol (65)	2	2	1	5
Turan, 2002	Turkey	Turk Anesteziyoloji ve Reanimasyon	none	not declared	yes	1. pre-empted transdermal nitroglycerine tape (50) 2. transdermal nitroglycerine tape 25 mg (50) 3. transdermal nitroglycerine tape 50 mg (50)	1	0	0	1
Ueki, 2007	Japan	J Anesth	0.831	not declared	no	1. plain propofol LCT Diprivan® (50) 2. propofol LCT Diprivan® and saline in a 3 : 1 mixture (50) 3. propofol LCT Diprivan® and flurbiprofen axetil in a 3 : 1 mixture (50) 4. plain propofol MCT/LCT Lipuro® (50) 5. propofol MCT/LCT Lipuro® and saline in a 3 : 1 mixture (50) 6. propofol MCT/LCT Lipuro® and flurbiprofen axetil in a 3 : 1 mixture (50)	1	1	1	3
Uzun, 2008	Turkey	J Anaesth Clin Pharm*	none	not declared	yes	1. dexmedetomidine 0.2 ug/kg + tourniquet (51) 2. normal saline + tourniquet (50)	1	1	0	2
Varghese, 2010 (P)	India	Pediatr Anesth	2.100	not declared	no	1. propofol LCT Profol® premixed with lignocaine (40) 2. propofol MCT/LCT Propofol-Lipuro® premixed with lignocaine (40)	2	2	0	4
Walker, 2011	US	Reg Anesth Pain Med	4.079	academic	yes	1. saline + tourniquet followed by admixture of propofol/saline (50) 2. lignocaine + tourniquet followed by admixture of propofol/saline (50) 3. saline + tourniquet followed by admixture of propofol/lignocaine (51)	2	1	1	4
Wallentine, 2011	Japan	Anesth Analg	3.286	industry	no	1. propofol in cyclodextrin (Captisol®) (16) 2. propofol in lipid (Diprivan®) (16)	1	1	0	2
Yadav, 2011	India	J Anaesth Clin Pharm*	none	none	yes	1. normal saline + tourniquet (18) 2. lignocaine + tourniquet (18) 3. hydrocortisone 10 mg + tourniquet (18) 4. hydrocortisone 25 mg + tourniquet (18)	2	2	0	4
Yeo, 2009	Korea	Curr Ther Res	0.333	none	yes	1. 15 mg ketorolac + propofol premixed to lignocaine (30) 2. saline + propofol premixed to lignocaine (30) 3. saline + propofol alone (30)	2	1	0	3
Yew, 2005	Singapore	Anesth Analg	3.286	not declared	no	1. propofol LCT premixed with lignocaine (25) 2. propofol-LCT/MCT premixed with normal saline (25) 3. propofol-LCT/MCT premixed with lignocaine (25)	2	1	0	3
Zahedi, 2009	Iran	Middle East J Anesthesiol	none	not declared	yes	1. normal saline (100) 2. lidocaine 1 mg/kg (100) 3. ketamine 50 µg/kg (100) 4. ketamine 75 µg/kg (100) 5. ketamine 100 µg/kg (100)	1	1	0	2
Zahedi, 2012	Iran	Acta Med Iran	none	not declared	yes	1. tramadol 50 mg + tourniquet (45) 2. ondansetron 4 mg + tourniquet (45) 3. saline + tourniquet (45)	1	1	0	2
Zhao, 2012 (P)	China	J Clin Anesth	1.213	not declared	no	1. normal saline (46) 2. ketamine 0.1 mg/kg (46) 3. ketamine 0.3 mg/kg (47) 4. ketamine 0.5 mg/kg (47)	1	1	0	2

(P) Paediatric trial; *Open access journal; (R): Trial with protocol registered. Randomisation: none (0); mentioned (1), described and adequate (i.e. computer-generated list of random numbers or sealed envelopes) (2); Blinding: none or observer-blinding only (0), double blinding described but not optimal (1), double dummies or convincing blinding procedures (2); Drop-outs: not described or incomplete (0), clear follow-up of each patient (1).