TITLE: PROPOFOL ANESTHESIA VERSUS

PARACERVICAL BLOCKADE FOR

OUTPATIENT LEGAL ABORTION.

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We have previously reported propofol as the drug of choice for induction of outpatient general anesthesia¹. The aim of this study was to compare propofol with paracervical blockade (PCB).

Methods: After institutional approval and informed consent, 59 legal abortion patients were studied. They received premedication with midazolam 0.1 mg/kg i.m. and alfentanil 0.01 mg/kg at the start of anesthesia. The patients were randomized into two groups. Group R (regional, 31 patients): midazolam 0.1 mg/kg i.v. and PCB with 2x10 ml of mepivacaine 20mg/ml+epinephrine 0.005mg/ml. The patients were breathing air spontaneously. Group G (general,28 patients):propofol 2.0 mg/kg i.v. induction and 75% nitrous oxide in oxygen, spontaneous ventilation. In 10 patients from the R-group bloodsamples were drawn at regular intervals for 30 min for serum concentration measurements (gaschromatography) of mepivacaine. The patients were evaluated double blind until discharge 3 hours after surgey: recovery function tests, p-deletion test, Maddox-wing, visual analogue scales of sedation and side-effects. 50 patients answered a questionnaire 4 days after the procedure.

Results: Some of the main per- and postoperative results are listed in table 1. There were no cases of hypotension or

Title: OUTPATIENT BRACHIAL PLEXUS ANESTHESIA Authors: W.J. Davis, M.D., R.L. Lennon, D.O., D.J. Wedel, M.D.

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Introduction. Outpatient surgery has undergone a period of significant growth in the United States. Approximately one-third of all injuries involving the upper extremities and about 6 million visits to hospital emergency rooms are due to upper extremity injuries, therefore, brachial plexus blockade is frequently employed to provide effective anesthesia in the outpatient setting.

Methods. We examined the results of 543 brachial plexus blocks performed by resident and staff anesthesiologists between September 1984 and October 1989 on 526 patients ranging in age from 8 to 91 years.

The patients' medical records were reviewed to determine type of brachial plexus block, technique used, number of hospital admissions and incidence of complications. This project was undertaken with the approval of the Institutional Review Board.

Results. The 526 patients had 543 brachial

Results. The 526 patients had 543 brachial plexus anesthetics via the following approaches: axillary 530, interscalene 9 and supraclavicular 4.

Techniques used for brachial plexus blocks are listed in the table. $\label{eq:table_plane}$

Observations noted included 40 incomplete blocks (7% of all blocks) requiring either inhalational anesthesia (36) or supplementing the block with thiopental and N_2O (4).

bradycardia. Maximum serum mepivacaine concentration (Group R) was reached at 15-30 min, range 1.5-5 microg/ml. The patients in both groups achieved preop. values in the p-deletion test at 60 min, whereas recovery of the Maddox wing test were incomplete in both groups 3 h post-op.

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Table 1: (mean+/-s.e.mean)	Group G	Group R				
Duration of procedure (min)	8.2+/-0.6	11+/-0.5**				
Duration of sleep (min)	12+/-0.8	2.5+/-0.7***				
Apnoe incidence (O ₂ sat.<85%)	25 %	0 % ***				
Post-op. pain-score (0-12)	2.4+/-0.4	1.4+/-0.3 *				
Post-op. nausea score (0-12)	0.6+/-0.2	0.8+/-0.3				
Able to drink at 120 min	100%	100%				
Able to walk steadily at 120 min	79%	81%				
Able to walk steadily at 180 min	100%	100%				
Questionnaire:						
Pain during induction of anesth.	17%	4%				
Pain during surgical procedure	0%	8%				
Pain after the procedure	67%	23% **				
Function score, evening (0-6)	5.6+/-0.2	5.5+/-0.2				
Days before fully recovered	1.3+/-0.3	1.7+/-0.3				
Prefer same anesthesia next time	92%	100%				
*P<0.05 **P<0.005 ***P<0.0001						

Discussion: The use of PCB+i.v.sedation for legal abortion has a potential of simplified and improved per- and postoperative patient care, in terms of no apnoe and less postop. pain compared with general anesthesia. Recovery was equally fast with both methods without any delay of discharge.

References:

Acta Anaesthesiol Scand 1988:32:607-613.

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Symptoms suggestive of systemic uptake of local anesthetic were noted in 5 cases (transarterial technique was used in 3/5), while 6 instances of nausea and/or vomiting occurred in the recovery room.

Postoperatively 84 (15.5%) of patients required hospital admission. Of the 459 patients discharged home on the day of surgery 361 left the hospital with some degree of sensory blockade still present. Only 80 (15%) required analgesics prior to discharge. No persistent neurologic deficit was ascribed to the anesthetic technique.

Discussion. Our experience confirms that brachial plexus blockade is a safe and effective option for outpatient upper extremity surgery. We noted a high success rate while using a variety of techniques with a low rate of complications.

The vast majority of the blocks performed were via the axillary approach; considering the possible complications associated with interscalene and supraclavicular brachial plexus blockade this approach appears to be appropriate for the outpatient setting.

References
1. Kelsey JL. CV Mosby 1980

<u>Technique</u>	No.	<u>(%)</u>	Success	<u>(%)</u>
Paresthesia + Transart.	152	(28)	146/152	(96)
Paresthesia	132	(24)	125/132	(95)
Transarterial	127	(23)	115/127	(91)
Nerve stimulator	104	(19)	92/104	(88)
N. stimulator + Transart	23	(4)	22/23	(96)
Sheath Single Injection	5	(1)	4/5	(80)