

Stanford



Sheila E. Cohen

Professor (Clinical) of Anesthesia, Emerita
Anesthesiology, Perioperative and Pain Medicine

Bio

ACADEMIC APPOINTMENTS

- Emeritus Faculty, Acad Council, Anesthesiology, Perioperative and Pain Medicine

Research & Scholarship

CURRENT RESEARCH AND SCHOLARLY INTERESTS

Our obstetric anesthesia group is interested in a variety of topics including the efficacy and mechanism of action of spinal and epidural opioids for production of analgesia during labor, and the functionality of epidural analgesia for labor pain relief. Recently, techniques have been directed at providing excellent analgesia with no or minimal motor blockade or side effects. We have performed clinical and volunteer studies to examine the effects of spinal sufentanil (a short-acting synthetic opioid) given to relieve labor pain, and the potential benefits of "walking epidurals" - a technique for epidural analgesia using such dilute solutions of local anesthetics combined with opioids that patients are able to ambulate.

Publications

PUBLICATIONS

- **Challenging the 4-to 5-minute rule: from perimortem cesarean to resuscitative hysterotomy** *AMERICAN JOURNAL OF OBSTETRICS AND GYNECOLOGY*
Lipman, S. S., Cohen, S., Mhyre, J., Carvalho, B., Einav, S., Arafah, J., Jeejeebhoy, F., Cobb, B., Druzin, M., Katz, V., Harney, K.
2016; 215 (1): 129-131
- **The society for obstetric anesthesia and perinatology consensus statement on the management of cardiac arrest in pregnancy.** *Anesthesia and analgesia*
Lipman, S., Cohen, S., Einav, S., Jeejeebhoy, F., Mhyre, J. M., Morrison, L. J., Katz, V., Tsen, L. C., Daniels, K., Halamek, L. P., Suresh, M. S., Arafah, J., Gauthier, et al
2014; 118 (5): 1003-1016
- **Response times for emergency cesarean delivery: use of simulation drills to assess and improve obstetric team performance** *JOURNAL OF PERINATOLOGY*
Lipman, S. S., Carvalho, B., Cohen, S. E., Druzin, M. L., Daniels, K.
2013; 33 (4): 259-263
- **Transport Decreases the Quality of Cardiopulmonary Resuscitation During Simulated Maternal Cardiac Arrest** *ANESTHESIA AND ANALGESIA*
Lipman, S. S., Wong, J. Y., Arafah, J., Cohen, S. E., Carvalho, B.
2013; 116 (1): 162-167
- **Measuring the labor pain experience: delivery still far off** *INTERNATIONAL JOURNAL OF OBSTETRIC ANESTHESIA*
Carvalho, B., Cohen, S. E.
2013; 22 (1): 6-9
- **The quality of CPR deteriorates during transport in simulated maternal arrests** *15th World-Federation-of-Societies-of-Anaesthesiologists (WFSA) World Congress of Anaesthesiologists*

- Wong, J., Lipman, S., Cohen, S., Arafah, J., Carvalho, B.
OXFORD UNIV PRESS.2012: 201–202
- **Intrathecal fentanyl added to bupivacaine and morphine for cesarean delivery may induce a subtle acute opioid tolerance** *INTERNATIONAL JOURNAL OF OBSTETRIC ANESTHESIA*
Carvalho, B., Drover, D. R., Ginosar, Y., Cohen, S. E., Riley, E. T.
2012; 21 (1): 29-34
 - **Labor Room Setting Compared With the Operating Room for Simulated Perimortem Cesarean Delivery A Randomized Controlled Trial** *OBSTETRICS AND GYNECOLOGY*
Lipman, S., Daniels, K., Cohen, S. E., Carvalho, B.
2011; 118 (5): 1090-1094
 - **Deficits in the provision of cardiopulmonary resuscitation during simulated obstetric crises** *AMERICAN JOURNAL OF OBSTETRICS AND GYNECOLOGY*
Lipman, S. S., Daniels, K. I., Carvalho, B., Arafah, J., Harney, K., Puck, A., Cohen, S. E., Druzin, M.
2010; 203 (2)
 - **Minimum effective bolus dose of oxytocin during elective Caesarean delivery** *BRITISH JOURNAL OF ANAESTHESIA*
Butwick, A. J., Coleman, L., Cohen, S. E., Riley, E. T., Carvalho, B.
2010; 104 (3): 338-343
 - **Hestastarch co-loading is as effective as pre-loading for the prevention of hypotension following spinal anesthesia for cesarean delivery** *INTERNATIONAL JOURNAL OF OBSTETRIC ANESTHESIA*
Carvalho, B., Mercier, F. J., Riley, E. T., Brummel, C., Cohen, S. E.
2009; 18 (2): 150-155
 - **Airway management in Nager Syndrome** *LARYNGOSCOPE*
Ho, A. S., Aleshi, P., Cohen, S. E., Kolai, P. J., Cheng, A. G.
2009; 119: S179-S179
 - **Airway management in Nager Syndrome** *INTERNATIONAL JOURNAL OF PEDIATRIC OTORHINOLARYNGOLOGY*
Ho, A. S., Aleshi, P., Cohen, S. E., Kolai, P. J., Cheng, A. G.
2008; 72 (12): 1885-1888
 - **Assessment of knowledge regarding cardiopulmonary resuscitation of pregnant women** *INTERNATIONAL JOURNAL OF OBSTETRIC ANESTHESIA*
Cohen, S. E., Andes, L. C., Carvalho, B.
2008; 17 (1): 20-25
 - **Local infiltration of epinephrine-containing lidocaine with bicarbonate reduces superficial bleeding and pain during labor epidural catheter insertion: a randomized trial** *INTERNATIONAL JOURNAL OF OBSTETRIC ANESTHESIA*
Carvalho, B., Fuller, A., Brummel, C., Cohen, S. E.
2007; 16 (2): 116-121
 - **Valdecoxib for postoperative pain management after cesarean delivery: A randomized, double-blind, placebo-controlled study** *37th Annual Meeting of the Society-for-Obstetric-Anesthesia-and-Perinatology*
Carvalho, B., Chu, L., Fuller, A., Cohen, S. E., Riley, E. T.
LIPPINCOTT WILLIAMS & WILKINS.2006: 664–70
 - **A survey of labor patient-controlled epidural anesthesia practice in California hospitals** *37th Annual Meeting of the Society-for-Obstetric-Anesthesia-and-Perinatology*
Carvalho, B., Wang, P., Cohen, S. E.
ELSEVIER SCI LTD.2006: 217–22
 - **Patient preferences for anesthesia outcomes associated with Cesarean delivery** *ANESTHESIA AND ANALGESIA*
Carvalho, B., Cohen, S. E., Lipman, S. S., Fuller, A., Mathusamy, A. D., Macario, A.
2005; 101 (4): 1182-1187
 - **The ED50 and ED95 of intrathecal isobaric bupivacaine with opioids for cesarean delivery** *ANESTHESIOLOGY*
Carvalho, B., Durbin, M., Drover, D. R., Cohen, S. E., Ginosar, Y., Riley, E. T.
2005; 103 (3): 606-612

- "Ultra-light" patient-controlled epidural analgesia during labor: effects of varying regimens on analgesia and physician workload *INTERNATIONAL JOURNAL OF OBSTETRIC ANESTHESIA*
Carvalho, B., Cohen, S. E., Giarrusso, K., Durbin, M., Riley, E. T., Lipman, S.
2005; 14 (3): 223-229
- Valdecoxib for postoperative pain management after cesarean section: A randomized, double-blinded, placebo controlled study *37th Annual Meeting of the Society-for-Obstetric-Anesthesia-and-Perinatology*
Fuller, A. J., Brummel, C., Saxena, A., Chu, L., Riley, E. T., Cohen, S. E., Carvalho, B.
LIPPINCOTT WILLIAMS & WILKINS.2005: A15-A15
- A survey of labor patient-controlled epidural anesthesia practice in Californian hospitals *37th Annual Meeting of the Society-for-Obstetric-Anesthesia-and-Perinatology*
Carvalho, B., Wang, P., Riley, E. T., Cohen, S. E.
LIPPINCOTT WILLIAMS & WILKINS.2005: A29-A29
- Single-dose, sustained-release epidural morphine in the management of postoperative pain after elective Cesarean delivery: Results of a multicenter randomized controlled study *ANESTHESIA AND ANALGESIA*
Carvalho, B., Riley, E., Cohen, S. E., Gambling, D., PALMER, C., Huffnagle, H. J., Polley, L., Muir, H., Segal, S., Lihou, C., Manvelian, G.
2005; 100 (4): 1150-1158
- Randomized comparison of intravenous nitroglycerin and subcutaneous terbutaline for external cephalic version under tocolysis *AMERICAN JOURNAL OF OBSTETRICS AND GYNECOLOGY*
El-Sayed, Y. Y., Pullen, K., Riley, E. T., Lyell, D., Druzin, M. L., Cohen, S. E., Chitkara, U.
2004; 191 (6): 2051-2055
- Correction of intraoperative coagulopathy in a patient with neurofibromatosis type I with intravenous desmopressin (DDAVP) *INTERNATIONAL JOURNAL OF OBSTETRIC ANESTHESIA*
Lighthall, G. K., Morgan, C., Cohen, S. E.
2004; 13 (3): 174-177
- Preloading vs. postloading of colloid for the prevention of hypotension after spinal anesthesia for cesarean section *36th Annual Meeting of the Society-for-Obstetric-Anesthesia-and-Perinatology*
Brummel, C., Mercier, F., Fuller, A., Mathusamy, A., Lipman, S., Cohen, S. E., Riley, E. T.
LIPPINCOTT WILLIAMS & WILKINS.2004: B33-B33
- Patient preferences regarding cesarean section anesthesia outcomes *36th Annual Meeting of the Society-for-Obstetric-Anesthesia-and-Perinatology*
Carvalho, B., Macario, A., Lipman, S., Muthusamy, A. D., Fuller, A., Brummel, C., Cohen, S. E.
LIPPINCOTT WILLIAMS & WILKINS.2004: B37-B37
- ED50 and ED95 of intrathecal hyperbaric bupivacaine coadministered with opioids for cesarean delivery *Annual Meeting of the American-Society-of-Anesthesiologists*
Ginosar, Y., Mirikatani, E., Drover, D. R., Cohen, S. E., Riley, E. T.
LIPPINCOTT WILLIAMS & WILKINS.2004: 676-82
- The site of action of epidural fentanyl infusions in the presence of local anesthetics: A minimum local analgesic concentration infusion study in nulliparous labor *Annual Meeting of the Society-of-Obstetric-Anesthesiology-and-Perinatology*
Ginosar, Y., Columb, M. O., Cohen, S. E., Mirikatani, E., Tingle, M. S., Ratner, E. F., Angst, M. S., Riley, E. T.
LIPPINCOTT WILLIAMS & WILKINS.2003: 1439-45
- "Ultra-light" PCEA techniques in labor: Minimizing physician workload while optimizing outcome *35th Annual Meeting of the Society-for-Obstetric-Anesthesia-and-Perinatology*
Carvalho, B., Giarrusso, K., Durbin, M., Lipman, S., Rohlf, S., Riley, E. T., Cohen, S. E.
LIPPINCOTT WILLIAMS & WILKINS.2003: 2-2
- A comparison of the 24-gauge Sprotte (R) and Gertie Marx (R) spinal needles for combined spinal-epidural analgesia during labor *ANESTHESIOLOGY*
Riley, E. T., Hamilton, C. L., Ratner, E. F., Cohen, S. E.
2002; 97 (3): 574-577
- Phenylephrine added to prophylactic ephedrine infusion during spinal anesthesia for elective cesarean section *Annual Meeting of the American-Society-of-Anesthesiologists*
Mercier, F. J., Riley, E. T., Frederickson, W. L., Roger-Christoph, S., Benhamou, D., Cohen, S. E.

LIPPINCOTT WILLIAMS & WILKINS.2001: 668–74

● **Mask induction with sevoflurane in a parturient with severe tracheal stenosis** *ANESTHESIOLOGY*

Ratner, E. F., Cohen, S. E., El Sayed, Y., Druzin, M.
2001; 95 (2): 553-555

● **Walking with labor epidural analgesia - The impact of bupivacaine concentration and a lidocaine-epinephrine test dose** *Annual Meeting of the Society-for-Obstetric-Anesthesia-and-Perinatology*

Cohen, S. E., Yeh, J. Y., Riley, E. T., Vogel, T. M.
LIPPINCOTT WILLIAMS & WILKINS.2000: 387–92

● **Labor epidural analgesia: back to the dark ages or a potential win-win situation** *INTERNATIONAL JOURNAL OF OBSTETRIC ANESTHESIA*

Cohen, S. E.
1999; 8 (4): 223-225

● **Complications of labor epidural analgesia: How much risk are patients willing to accept?**

Vogel, T. M., Riley, E. T., Johnson, K., Cohen, S. E.
LIPPINCOTT WILLIAMS & WILKINS.1999: U437–U437

● **Statistical analysis of total labor pain using the visual analog scale and application to studies of analgesic effectiveness during childbirth** *ANESTHESIA AND ANALGESIA*

Cohen, S. E.
1999; 88 (5): 1193-1194

● **Complications of labor epidural analgesia: How much risk are patients willing to accept?**

Vogel, T. M., Riley, E. T., Johnson, K., Cohen, S. E.
LIPPINCOTT WILLIAMS & WILKINS.1999

● **Randomized comparison of intravenous nitroglycerin and magnesium sulfate for treatment of preterm labor** *OBSTETRICS AND GYNECOLOGY*

El-Sayed, Y. Y., Riley, E. T., Holbrook, R. H., Cohen, S. E., Chitkara, U., Druzin, M. L.
1999; 93 (1): 79-83

● **Obstetric postanesthesia care unit stays - Reevaluation of discharge criteria after regional anesthesia** *Annual Meeting of the American-Society-of-Anesthesiologists*

Cohen, S. E., Hamilton, C. L., Riley, E. T., Walker, D. S., Macario, A., Halpern, J. W.
LIPPINCOTT WILLIAMS & WILKINS.1998: 1559–65

● **Complications of labor epidural analgesia: Do the perceptions of patients and anesthesiologists differ?**

Vogel, T. M., Riley, E. T., Cohen, S. E., Johnson, K.
LIPPINCOTT WILLIAMS & WILKINS.1998: U865–U865

● **Intrathecal sufentanil produces sensory changes without hypotension in male volunteers** *46th Annual Meeting of the American-Society-of-Anesthesiologists*

Riley, E. T., Hamilton, C. L., Cohen, S. E.
LIPPINCOTT WILLIAMS & WILKINS.1998: 73–78

● **"Walking epidurals": Impact of bupivacaine bolus concentration and a lidocaine-epinephrine test dose**

Yeh, J. Y., Riley, E. T., Vogel, T. M., Cohen, S. E.
LIPPINCOTT WILLIAMS & WILKINS.1998: U8–U8

● **Intrathecal sufentanil for labor analgesia does not cause a sympathectomy** *46th Annual Meeting of the American-Society-of-Anesthesiologists*

Riley, E. T., Walker, D., Hamilton, C. L., Cohen, S. E.
LIPPINCOTT WILLIAMS & WILKINS.1997: 874–78

● **Changes in the position of epidural catheters associated with patient movement** *ANESTHESIOLOGY*

Hamilton, C. L., Riley, E. T., Cohen, S. E.
1997; 86 (4): 778-784

● **Intrathecal sufentanil for labor analgesia: Do sensory changes predict better analgesia and greater hypotension?** *American-Society-of-Anesthesiologists Annual Meeting*

Riley, E. T., Ratner, E. F., Cohen, S. E.
LIPPINCOTT WILLIAMS & WILKINS.1997: 346–51

- **Strategies for labor pain relief--past, present and future.** *Acta anaesthesiologica Scandinavica. Supplementum*
Cohen, S.
1997; 110: 17-21
- **Intravenous nitroglycerin: a potent uterine relaxant for emergency obstetric procedures. Review of literature and report of three cases.** *International journal of obstetric anesthesia*
Riley, E. T., Flanagan, B., Cohen, S. E., Chitkarat, U.
1996; 5 (4): 264-268
- **Ketorolac and spinal morphine for postcesarean analgesia.** *International journal of obstetric anesthesia*
Cohen, S. E., Desai, J. B., Ratner, E. F., Riley, E. T., Halpern, J.
1996; 5 (1): 14-18
- **HIGH SENSORY BLOCK AFTER INTRATHECAL SUFENTANIL FOR LABOR ANALGESIA.** *ANESTHESIOLOGY*
Hamilton, C. L., Cohen, S. E.
1995; 83 (5): 1118-1121
- **PREVENTION OF HYPOTENSION AFTER SPINAL-ANESTHESIA FOR CESAREAN-SECTION - 6 PERCENT HETASTARCH VERSUS LACTATED RINGERS SOLUTION** *ANESTHESIA AND ANALGESIA*
Riley, E. T., Cohen, S. E., Rubenstein, A. J., Flanagan, B.
1995; 81 (4): 838-842
- **PLACENTAL-TRANSFER AND NEONATAL EFFECTS OF EPIDURAL SUFENTANIL AND FENTANYL ADMINISTERED WITH BUPIVACAINE DURING LABOR** *ANESTHESIOLOGY*
LOFTUS, J. R., Hill, H., Cohen, S. E.
1995; 83 (2): 300-308
- **SPINAL VERSUS EPIDURAL-ANESTHESIA FOR CESAREAN-SECTION - A COMPARISON OF TIME EFFICIENCY, COSTS, CHARGES, AND COMPLICATIONS** *ANESTHESIA AND ANALGESIA*
Riley, E. T., Cohen, S. E., Macario, A., Desai, J. B., Ratner, E. F.
1995; 80 (4): 709-712
- **PARTURIENTS POSTURE DURING EPIDURAL PUNCTURE AFFECTS THE DISTANCE FROM SKIN TO EPIDURAL SPACE** *JOURNAL OF CLINICAL ANESTHESIA*
Hamza, J., Smida, M., Benhamou, D., Cohen, S. E.
1995; 7 (1): 1-4
- **EPIDURAL ANALGESIA AND THE INCIDENCE OF CESAREAN-SECTION - TIME FOR A CLOSER LOOK** *ANESTHESIOLOGY*
Dewan, D. M., Cohen, S. E.
1994; 80 (6): 1189-1192
- **INTRATHECAL SUFENTANIL FOR LABOR ANALGESIA - SENSORY CHANGES, SIDE-EFFECTS, AND FETAL HEART-RATE CHANGES** *ANESTHESIA AND ANALGESIA*
Cohen, S. E., CHERRY, C. M., Holbrook, R. H., ELSAYED, Y. Y., Gibson, R. N., Jaffe, R. A.
1993; 77 (6): 1155-1160
- **NALBUPHINE IS BETTER THAN NALOXONE FOR TREATMENT OF SIDE-EFFECTS AFTER EPIDURAL MORPHINE** *ANESTHESIA AND ANALGESIA*
Cohen, S. E., Ratner, E. F., KREITZMAN, T. R., ARCHER, J. H., MIGNANO, L. R.
1992; 75 (5): 747-752
- **RESPIRATORY EFFECTS OF EPIDURAL SUFENTANIL AFTER CESAREAN-SECTION** *ANESTHESIA AND ANALGESIA*
Cohen, S. E., Labaille, T., Benhamou, D., Levron, J. C.
1992; 74 (5): 677-682
- **FETAL HEART-RATE AFTER EPIDURAL LIDOCAINE AND BUPIVACAINE FOR ELECTIVE CESAREAN-SECTION** *ANESTHESIOLOGY*
LOFTUS, J. R., Holbrook, R. H., Cohen, S. E.
1991; 75 (3): 406-412
- **VENTILATORY RESPONSE TO CARBON-DIOXIDE AFTER EPIDURAL CLONIDINE INJECTION** *ANESTHESIA AND ANALGESIA*
Penon, C., Ecoffey, C., Cohen, S. E.

1991; 72 (6): 761-764

● **AT THE WATERS EDGE - WHERE OBSTETRICS AND ANESTHESIA MEET *OBSTETRICS AND GYNECOLOGY***

Chestnut, D. H., Cohen, S. E.

1991; 77 (6): 965-966

● **ANALGESIA AFTER CESAREAN DELIVERY - PATIENT EVALUATIONS AND COSTS OF 5 OPIOID TECHNIQUES *REGIONAL ANESTHESIA***

Cohen, S. E., Subak, L. L., Brose, W. G., Halpern, J.

1991; 16 (3): 141-149

● **Maternally administered esmolol decreases fetal as well as maternal heart rate. *Journal of clinical anesthesia***

LARSON, C. P., Shuer, L. M., Cohen, S. E.

1990; 2 (6): 427-429

● **OXYHEMOGLOBIN SATURATION FOLLOWING CESAREAN-SECTION IN PATIENTS RECEIVING EPIDURAL MORPHINE, PCA, OR IM MEPERIDINE ANALGESIA *ANESTHESIOLOGY***

Brose, W. G., Cohen, S. E.

1989; 70 (6): 948-953

● **A COMPLICATION ASSOCIATED WITH THE USE OF MIDAZOLAM *ANESTHESIOLOGY***

ENGSTROM, R. H., Cohen, S. E.

1989; 70 (4): 719-719

● **EPIDURAL LIDOCAINE FOR CESAREAN-SECTION - EFFECT OF VARYING EPINEPHRINE CONCENTRATION *ANESTHESIOLOGY***

Brose, W. G., Cohen, S. E.

1988; 69 (6): 936-940

● **SUFENTANIL ANALGESIA FOLLOWING CESAREAN-SECTION - EPIDURAL VERSUS INTRAVENOUS ADMINISTRATION *ANESTHESIOLOGY***

Cohen, S. E., Tan, S., White, P. F.

1988; 68 (1): 129-134

● **EPIDURAL FENTANYL BUPIVACAINE MIXTURES FOR OBSTETRIC ANALGESIA *ANESTHESIOLOGY***

Cohen, S. E., Tan, S., Albright, G. A., Halpern, J.

1987; 67 (3): 403-407

● **RISK OF ABORTION FOLLOWING GENERAL-ANESTHESIA FOR SURGERY DURING PREGNANCY - ANESTHETIC OR SURGICAL-PROCEDURE *ANESTHESIOLOGY***

Cohen, S. E.

1986; 65 (6): 706-706

● **EPIDURAL FENTANYL BUPIVACAINE COMBINATIONS FOR LABOR ANALGESIA - EFFECT OF VARYING DOSAGES**

Cohen, S. E., Tan, S., Albright, G. A., Halpern, J.

LIPPINCOTT WILLIAMS & WILKINS.1986: A368-A368

● **EPIDURAL BLOOD PATCH IN OUTPATIENTS - A SIMPLER APPROACH *ANESTHESIA AND ANALGESIA***

Cohen, S. E.

1985; 64 (4): 458-458

● **ANTIEMETIC EFFICACY OF DROPERIDOL AND METOCLOPRAMIDE *ANESTHESIOLOGY***

Cohen, S. E., Woods, W. A., Wyner, J.

1984; 60 (1): 67-69

● **DOES METOCLOPRAMIDE DECREASE THE VOLUME OF GASTRIC CONTENTS IN PATIENTS UNDERGOING CESAREAN-SECTION *ANESTHESIOLOGY***

Cohen, S. E., Jasson, J., TALAFRE, M. L., CHAUVELOTMOACHON, L., Barrier, G.

1984; 61 (5): 604-607

● **EARLY RESPIRATORY DEPRESSION WITH EPIDURAL NARCOTIC AND INTRAVENOUS DROPERIDOL *ANESTHESIOLOGY***

Cohen, S. E., ROTHBLATT, A. J., Albright, G. A.

1983; 59 (6): 559-560

- **THE ROLE OF EPIDURAL MORPHINE IN THE POSTCESAREAN PATIENT - EFFICACY AND EFFECTS ON BONDING ANESTHESIOLOGY**
Cohen, S. E., Woods, W. A.
1983; 58 (6): 500-504
- **THE ASPIRATION SYNDROME CLINICS IN OBSTETRICS AND GYNAECOLOGY**
Cohen, S. E.
1982; 9 (2): 235-254
- **GASTRIC VOLUME IN EARLY-PREGNANCY - EFFECT OF METOCLOPRAMIDE ANESTHESIOLOGY**
Wyner, J., Cohen, S. E.
1982; 57 (3): 209-212
- **HIGH-DOSE EPIDURAL MORPHINE IN A TERMINALLY ILL PATIENT ANESTHESIOLOGY**
Woods, W. A., Cohen, S. E.
1982; 56 (4): 311-312
- **ANESTHESIA FOR CESAREAN-SECTION IN ACHONDROPLASTIC DWARFS ANESTHESIOLOGY**
Cohen, S. E.
1980; 52 (3): 264-266
- **ASPIRATION SYNDROMES IN PREGNANCY ANESTHESIOLOGY**
Cohen, S. E.
1979; 51 (5): 375-377
- **HALOTHANE BIOTRANSFORMATION IN ANESTHETISTS ANESTHESIOLOGY**
Duvaldestin, P., Mazze, R. I., HAZEBROUCK, J., Nivoche, Y., Cohen, S. E., Desmonts, J. M.
1979; 51 (1): 41-46
- **COMPARISON OF A CHLOROPROCAINE-BUPIVACAINE MIXTURE WITH CHLOROPROCAINE AND BUPIVACAINE USED INDIVIDUALLY FOR OBSTETRIC EPIDURAL ANALGESIA ANESTHESIOLOGY**
Cohen, S. E., THURLOW, A.
1979; 51 (4): 288-292