

# THE HONG KONG COLLEGE OF ANAESTHESIOLOGISTS

香港麻醉科醫學院

NEWSLETTER
June 2000

President: Dr TW Lee

1st Vice President: Dr J Liu

2nd Vice President: Professor D Chung

Hon Secretary: Dr PT Chui

Hon Treasurer: Dr T Hui

Assistant Secretary: Dr KF Ng

Assistant Treasurer: Dr T Buckley

Council Members: Professor C Aun/

Dr SL Tsui
Dr PP Chen
Dr A Kwan
Dr YF Chow

Dr TY Chan

Dr J Lui / Dr J Low /

Dr CT Hung

Board of Education - Chairman: Dr CT Hung

Board of Accreditation - Chairman: Dr C Yuan

**Board of Examination - Chairman :** Professor C Aun

**Board of Censor - Chairman:** Dr SL Tsui

Intensive Care Committee - Chairman: Dr T Buckley

Manpower Committee - Chairman: Dr J Low

Pain Management Committee - Chairman: Dr PP Chen

Guidelines Committee - Chairman: Dr A Kwan

**Resuscitation Committee - Chairman:** Dr M Moles

Editor of Newsletter: Dr A Kwan

Training Officer - Dr YF Chow

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# Message from the President

On behalf of the council, I wish to report the following activities of the College.

#### CME/CPD

CME returns will be circulated to Fellows who have completed a new CME year by the end of June. Please complete and return them to the College secretariat.

CPD is still being actively discussed by the academy. There is general acceptance by College representatives. It has also been agreed that individual Colleges should be allowed the flexibility to design their programmes, thus catering for different requirements of different specialties. The majority opinion of Colleges, however, favours gradual implementation with initial voluntary participation. The time frame has not been specified but is unlikely to be within this CME cycle.

### **College Website**

Those of you who regularly browse the College website will find that there are some changes. In order to facilitate access to resources on the Internet, links have been established to journals and other sites of interest. Some journals offer full text on the Internet while others would only allow free access to the content page and/ or abstracts. All these are available for browsing through the College homepage. Currently the feasibility of including the abstracts of anaesthetic journal in our homepage, including Chinese translation, is being considered. This may increase our communication with our Chinese counterparts. There may be interest from the health care industry to support these types of activities. As we hope to increase the scope of the College homepage, it would be useful to form an IT committee. Fellows and members who have the technical expertise will be most welcome, but net surfers can also help by giving important feed back from a user point of view. Those who are interested please contact Dr. PT Chui, our webmaster.

## **Future Meetings**

#### **ASM2000**

Under the leadership of Dr. Chow Yu Fat, the organizing committee of ASM 2000 has compiled an exciting programme on the theme of 'Peri-operative Medicine in the New Millennium'. In addition to two concurrent refresher courses on the Saturday morning, there will be several workshops. As last year, there will be a simulator workshop and an airway workshop. New additions include an Anatomy Workshop on Regional Anaesthesia and an Evidenced Based Medicine Workshop. On popular demand, the programmes that were both educational and entertaining such as the debate, medico-legal seminar and wine tasting will be retained. The ASM not only provides an opportunity to update our knowledge but it is also an occasion for renewing acquaintance and for sharing of experience and ideas.

### International congress of the Hong Kong Academy of Medicine

The second International Congress of the Hong Kong Academy of Medicine will be held from 2nd to 5th November 2000. Our college has invited Dr. Roger Goucke from Perth to contribute to a symposium on Pain Medicine. A separate College scientific meeting will be held during his visit to Hong Kong.

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### **CSM 2001**

Preparation for the Combined Scientific Meeting with Australian and New Zealand College of Anaesthetists is well underway. A high percentage of ANZCA fellows that responded to a questionnaire indicated their intention to come to Hong Kong for the CSM. Meeting flyers will be circulated to fellows and Members in the near future.

## Asian Oceanic Society for Intravenous Anaesthesia

After much deliberation, Council has decided that the 2003 ASM will be a joint meeting with the Asian Oceanic Society for Intravenous Anaesthesia. Hopefully this will increase the international exposure of our College and attract more delegates from overseas, particularly South Korea and Japan.

We look forward to your support of College activities and will keep you informed of future developments.

DrTW Lee President HKCA

# **Board of Accreditation / Board of Censors**

# **Diploma in Pain Management Training Posts**

Hospital	Duration	No of Post(s)
Queen Mary Hospital	12 months	2
Prince of Wales Hospital	12 months	1
United Christian Hospital	12 months	1

# **EXIT ASSESSMENT**

## The dates for the Exit Assessment in 2000 are as follows:

- 3 January 2000
- 6 March 2000
- 2 May 2000
- 3 July 2000
- 4 September 2000
- 6 November 2000

# **Report from Pain Management Committee**

# **HKCA Pain Management Scientific Meetings Programme 2000/2001**

Arranged by Pain Committee HKCA

Accredited for CME with HKCA, ANZCA, FPMANZCA

	Hospitals	Date
1.	PMH/CMC	April 2000
2.	PWH	July 2000
3.	AHNH/NDH	Oct 2000
4.	UCH	Jan 2001
5.	ТМН	April 2001
6.	PYNEH	July 2001
7.	KWH	Oct 2001
8.	QEH	Jan 2002
9.	QMH	April 2002

# HKCA Pain Management Scientific Meetings Programme 2000/2001

## Other Meetings

	Guest Speaker	Date
1,	Dr Stefan Schug, Associate Professor, Department of Pharmacology, Auckland University, New Zealand	20th May 2000 HKCA AGM
2.	Professor P.O. Bridenbaugh, Professor and Chairman, University of Cincinnati Medical Center College of Medicine, Cincinnati, Ohio, US	8-10th Sept 2000 ASM in Anaesthesiology, HK
3,	Professor Mathieu Gielen, Institute for Anaesthesiology, Nijmegen,The Netherlands	8-10th Sept 2000 ASM in Anaesthesiology, HK
4.	Dr Roger Goucke, Vice Dean, Faculty of Pain Medicine ANZCA, Director of Pain Management, Sir Charles Gardiner Hospital, Perth, Australia	5th, 6th November 2000 HKAM International Congress HKCA Scientific Meeting

PP Chen Chairman of Pain Management Committee

# **Examination Report**

31 candidates sat the Intermediate Fellowship Examination January / March 2000. The pass rate was 29%. The following were successful.

Dr Chan, Lina

Dr Chua, Swee Kim

Dr Lam, Mo Chi

Dr Lee, Chung Yin Joanne

Dr Lee, Ha Yun

Dr Li, Yin Fai

Dr Man, Kwan Yin

Dr Pang, Chi Kwan

Dr Ung, Sze Man, Eric

The College is grateful to Dr Ken Burchett of RCA, and Dr Peter Kam of ANZCA for their assistance as External Examiners during the examination.

12 candidates sat the Final Fellowship Examination February / March 2000. The pass rate was 83%. The following were successful.

Dr Chan, Ka Lai

Dr Yu, Sui Cheung

Dr Lam, Ka Chi

Dr Wong, Yu Chung Andrew

Dr Yick, Fung Yi

Dr Lai, Kin Wah

Dr Wong Kwong Sun

Dr Chan, Kin Chung

Dr Poon, Chung Mo Michael

Dr Szeto, Ling Dione

The College is grateful to Dr John Sear of RCA, and Dr John Russell of ANZCA for their assistance as External Examiners during the examination.

# Congratulations!!!



Dr John Russell and Dr John Sears with the panel of local examiners



Dr John Russell and Dr Jon Sears with the successful candidates at the March 2000 HKCA Final Examination



Some local examiners with a successful candidate at the March 2000 HKCA Final Examination

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# **HKCA Year 2000 Examination Dates**

The examination dates for year 2000 are as follows. Please note the dates are earlier than in the previous years.

# Intermediate Fellowship Examinations Examination Fee: \$ 7,000

June / July

Written:

14 June 2000 (Wed)

Oral :

14/15 July 2000 (Fri/Sat)

Closing Date:

15 May 2000 (Mon)

# Final Fellowship Examinations in Anaesthesiology Examination Fee: \$ 11,000

June / July

Written:

23 June 2000 (Fri)

Oral/OSCE:

28/29 July 2000 (Fri/Sat)

Closing Date:

23 May 2000 (Tue)

# Final Fellowship Examination in Intensive Care Examination Fee: \$ 11,000

Dates to be arranged

# Examination in Diploma in Pain Management. Examination fee: \$5,000

Written:

3 October 2000 (Tue)

Closing Date:

3 September 2000 (Sun)

The supervisors of training who are interested to observe the viva are welcome to sit as observers at the college oral examinations. Please send in your requests for arrangements to Mr Daniel Tso at the College office.

## **Announcement**

The following members have Diploma in the College for collection. Since this document cannot be replaced, kindly make arrangement to have them picked up in person or have someone authorised in writing to pick up on your behalf. The College office is located at Room 807, HKAM Jockey Club Building, 99 Wong Chuk Hang Road, Aberdeen, Hong Kong. Office hour is from 9:00am - 5:00 pm.

## **DPM**

TITLE	NAME
Dr.	Chan, Wing-sang
Dr.	Kwok, Che-ling
Dr.	Lam, Kwok Key
Dr.	Onsiong, Meng-keong
Dr.	Tay, Beng Aik
Dr.	Tong, Wai-nung Edwin
Dr.	Sze,Tak Suen

## FHKCA(Ana)

TITLE	NAME
Dr.	Chia, Zse-han Paul
Dr	Chow, Yiu Tong
Dr	Chu, Ping-wing Christopher
Dr	Chu, Kwok Wah
Dr	Chu, Siu-man Kitty
Dr.	Gomersall, Charles David
Dr.	Greenland, Keith Benjamin
Dr.	Hiong, Yee-tian
Dr.	Ho, Pik-Yee Betty
Dr.	Law, Min Jean Claude
Dr	Li, Ho-yin Adrian
Dr	Lim, Jean Marie Jin Ai
Dr	Rowbottom, Simon James
Dr.	Shakespeare, Thomas Francis
Dr.	Sze,Tak Suen
Dr.	Tan, Chin-how
Dr	Tang, Chung Hong
Dr.	Yau, Hok Shing Ernest
Dr.	Yau, Kwok Keung Anthony
Dr	Yip, Eric

## FHKCA(IC)

TITLE	NAME
Dr	Tan, Yuen Heng Peggy

# Announcement

Dr Amy Lam, Chief of service (Anaesthesia) of the Queen Elizabeth Hospital, was chosen as one of the outstanding staff of the Hospital Authority this year.

#### Selection criteria include:

- The impact of the achievements on patient care delivery and organisational effectiveness;
- The extent to which the achievements are attained as a consequence of the nominee's actions;
- The demonstration of extra efforts put in by the nominee beyond the normal call of his/her duties:
- The contribution to the enhancement of the Hospital Authority's image;
- · The contribution to the community at large; and
- Specific merits of individual nominations.

# Congratulations!!!



Some HKCA Council members with Professor Joseph Yang at his Farewell Dinner

# Certificate Course in Anaesthetic Assistance

# Year 2001 Intake

## **Entry requirements:**

- Those with nursing qualifications must hold a certificate as an Enrolled Nurse or Registered Nurse, or their equivalent
- Those without nursing qualifications must have the Hong Kong Certificate of Education Examination with at least 5 passes or its equivalent
- · Applicants aged over 21 and with relevant experience may be considered for mature student entry

## Proposed class size:

• 25 to 30 per class, approximately 2 to 3 classes will be organised in the year 2001

## Theoretical training:

- 40 Saturday half day lectures and workshops (January to November)
- Hours of lecture 0900 to 1230 hours; 2 sessions each of 90 minutes duration (0900-1030, 1100-1230 hours)
- Hours of workshop 0900 to 1230 hours; workshop will be conducted at the Operating Theatres of various hospitals

## **Practical training:**

- Minimum of 20 hours per week for 20 weeks
- · Documentation in form of log book

## Lecture materials:

· Lecture notes supplied by lecturers

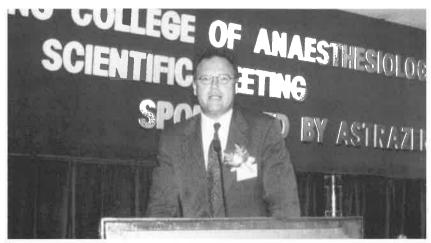
### **Assessment:**

- >80% lecture attendance is required
- · Submission of log book
- Assessment by supervisor (30% of marks)
- Assignments (30% of marks)
- Examination (40% of marks)

### **Examination:**

- Paper MCQs, short questions
- OSCE two stations each of 10 minutes duration

Enquiries: Dr Anne Kwan, Department of Anaesthesia, United Christian Hospital



Dr Stephen Schug speaking at our Hong Kong College of Anaesthesiologists Annual General Meeting in May 2000

# Does Regional Anaesthesia Improve Outcome?

Stephan A. Schug MD FANZCA FFPMANZCA Section of Anaesthetics University of Auckland Auckland

#### **New Zealand**

Despite dozens of trials comparing regional with general anesthesia over the last decades, there continues to be considerable uncertainty about differences in outcome with regard to mortality or major morbidity. Most anesthetists seem to be convinced that regional anesthesia offers certain advantages; when asked in various surveys, 74 to 94% of our colleagues would prefer regional over general anesthesia for suitable surgery, if they were the patient.

However, the scientific evidence to support this attitude is not convincing. On the contrary, an editorial in Anesthesiology stated recently: "Additional randomized trials comparing regional and general anesthesia to determine their effects on perioperative cardiac morbidity and mortality are unlikely to be useful. As of now, further trials are not needed." (1).

The editors explain in detail, why they come to this conclusion: "In this issue ... data from the largest randomized clinical trial in this area; once again, they have found no difference between the different types of anesthesia..., albeit in a study that admittedly lacked power to find a small difference." (1)

The last statement is quite remarkable, as nothing else than a small difference could be expected. The trial the editors refer to randomly assigned ca. 300 patients to spinal, epidural and general anesthesia, respectively.(2) In view of these small numbers the authors themselves warn: "if differences exist, their magnitude is on the order of 1-4%..."

It is surprising, that the editorial quoted above ignores this statement and concludes: "Thus, although a study with a much larger sample size may find a statistically significant difference in cardiac outcomes, it is unlikely to find a clinically significant difference." (1) Clearly a difference in mortality between 2 anesthetic techniques in the order of 1-4%, meaning 1 death in 25 to 100 patients, is of extreme clinical relevance. The editors have here obviously fallen into the trap of treating a 'lack of evidence' as an 'evidence of lack of effect'.

This error is most commonly done on the basis of studies with insufficient power; very often clinical trials are simply too small to detect plausible treatment effects. This has many reasons: unreasonable expectations about treatment effect, inclusion of low-risk patients and recruitment of too few patients due to complex design, restrictive entry criteria and lack of collaboration.

The above considerations make obvious that even if important outcome benefits of regional anesthesia do exist, they may well have been missed. One way to find out is to perform a systematic review or meta-analysis and thereby improve precision and validity. Such a systematic review increases power to detect moderate effects and avoids bias (by possibly looking at a non-representative subgroup of data), as it combines data of all relevant trials. Its validity is primarily based on the fact that treatment effects in different trials are usually combinable, i.e. relative treatment effects are similar. In general, qualitative differences of treatment effects in different trials are unlikely and random error is the most common reason for differences between trials. Therefore, and this has proven valid in many previous systematic reviews, one can get reliable information on the direction, but less reliable information on the exact extent of a treatment effect.

The statistical method commonly used is the Peto-modified Mantel-Haenszel method (3). This method calculates the treatment effect for each individual trial, thereby never comparing patients in one trial with patients in another trial. These data are then combined to calculate a 'typical' overall treatment effect. In more detail, for each trial an O-E (Observed-Expected) number is calculated; this is an absolute number reflecting the effect of a treatment and therefore also the size of the trial. Similarly an odds ratio is calculated. It reflects the relative treatment effect and equals one, if there is no treatment effect; values smaller than one show superiority of the active, values larger than one of the control treatment.

A Grand Total of all O-E values is calculated as the sum of these values; this should differ only by chance from zero, if the treatment is ineffective. A variance of the Grand Total gives confidence limits. Usually the results of such a systematic review are presented in specific diagrams.

On the basis of the above considerations, the CORTRA (Collaborative Overview of Randomised Trials of Regional Anaesthesia) group was formed to perform a meta-analysis of all trials comparing regional (epidural and spinal) with general anesthesia. The results of this systematic review have been submitted for publication and are summarized as follows.(4)

The goal of the group was to summarize all randomized evidence on the effects of neuraxial blockade (spinal or epidural) on fatal or serious non-fatal postoperative complications. Included were all trials completed before 1 January 1997, irrespective of their publication status, language, initial aim and type of surgery investigated, as long as patients were randomized between neuraxial blockade with or without general anesthesia and general anesthesia. Excluded were trials in which regional anesthesia was only started postoperatively.

Trials were identified initially by searching electronic data bases using standardized search strategies, then by scanning the reference lists of the so identified publications as well as by searching conference proceedings and contacting all study authors. Of the initially identified trials ten had to be excluded as they were quasirandomized (i.e. foreknowledge of the allocation was possible), six as not all patients reported were randomized and 19 trials required special consideration as they contained data on patients published more than once. 142 trials with 9553 patients were finally submitted to the meta-analysis.

The authors summarize their results as follows: "Contact was made with investigators from 107 (75%) trials involving 8,292 (87%) patients. Overall mortality was reduced by about one-third in patients allocated RA (odds ratio 0.70, 95% confidence interval 0.54 - 0.91, 2p=0.008), with approximately one less death per100 patients in the 30 days after randomisation [103/4,868 (2.1%) versus 143/4,685 (3.1%)]. Regional anesthesia reduced the odds of deep vein thrombosis by 44%, pulmonary embolism by 55%, transfusion requirements by 50%, and pneumonia by 39% and respiratory depression by 59% (all 2p<0.0001). There were also reductions in myocardial infarction (0.67, 0.45-1.00) and renal failure (0.57, 0.32 - 1.00). Although there was limited power to assess subgroup effects, the proportional reductions in mortality did not clearly differ by surgical group or by type of regional anesthesia (spinal or epidural, concomitant GA or not)."

Overall this meta-analysis shows significant superiority of regional over general anesthesia with regard to perioperative outcome, in particular mortality and many aspects of serious non-fatal morbidity. This is the first evidence of an overall outcome improvement by the use of regional anesthesia in appropriate patients.

#### References:

- (1) Go A & Browner. Cardiac outcomes after regional or general anesthesia: do we have the answer? Anesthesiology 1996;84(1):1-2.
- (2) Bode R, Lewis K, Zarich S, et al. Cardiac outcome after peripheral vascular surgery: comparison of general and regional anesthesia. *Anesthesiology* 1996;84:3-13.
- (3) Yusuf S, Peto R, Lewis J, Collins R, Sleight P. Beta blockade during and after myocardial infarction: an overview of the randomized trials. Prog Cardiovasc Dis 1985;XXVII(5):335-371.
- (4) Rodgers A, Walker N, Schug SA, et al. Regional anaesthesia reduces postoperative mortality and morbidity: results from an overview of randomised trials. *British Medical Journal* 2000 (submitted for publication).



Dr Arthur Lam speaking at our Hong Kong College of Anaesthesiologists Annual General Meeting in May 2000

# New advances in the management of acute head injury.

It is well established that there is an acute reduction in cerebral blood flow after acute head injury. This is time related, usually being within the first 12 hours. Transient systolic hypotension is associated with a poor outcome especially if repeated episodes occur. Furthermore SjvO2 desaturation is associated with a poor outcome especially if repeated.

Aims for BP and O2: Standard: none; Guidelines: SBP>90 mmHg / PaO2>60 mmHg

However there are different schools of thought in regard to the relationship between BP and CPP

- Maintain SBP>90 or CPP>70 (Brain Trauma Foundation)
- Maintain CPP>80 (Rosner protocol)
- Maintain CPP>60 (ICP targeted, Marshell approach)
- Lower SBP, maintain colloid osmotic pressure, vasoconstriction (Lund therapy)

The future goal for BP management: head injury is a heterogenous and dynamic disease. Individual therapy should be tailored to the specific pathology identified with sophisticated monitoring and diagnostic tests.

CO2 autoregulation is usually maintained. Therefore it is recommended:

- Standard: to avoid PaCO2 <30 mmHg,
- · Guideline: avoid hyperventilation
- Options: may be necessary but should be used with adjuncts such as SjvO2

The use of hyperventilation in the acute control of raised ICP may cause cerebral ischaemia and a left shift of the Oxygen dissociation curve.

#### Other areas covered included:

- NMDA antagonists have not been shown to be protective for head injury.
- Head elevation improves venous drainage, but decreases MAP at head level.
- There are now tissue oxygen tension (PbO2) probes available which give an indication of local tissue oxygenation.
- Synthetic opioids such as fentanyl and sufentanyl increased ICP but this was not related to autoregulation.
- Hypothermia did not improve outcome.

Summarised by Tim Brake

# Annual Scientific Meeting in Anaesthesiology 2000 Programme

# Saturday 9 September 2000

0830 - 0900	Registration			
0900 - 1030	Refresher Course (I)	Refresher Course (II)	Airway Workshop Prof. David Chung	
1030 - 1100	Coffee Break			Regional Anatomy
1100 - 1230	Refresher Course (I)	Workshop Prof. Phillip Bridenbaug		
1230 - 1330	Lunch			
1330 - 1400	Opening Ceremony			
1400 - 1500	Chairman: Dr. T.W. Lee The Road Ahead - Prof. Phillip Bridenbar Lung Protective Ventil Dr. Neil MacIntyre	Anaesthesiologists a ugh	s Perioperative Phy	
1530 - 1600	Coffee Break			
1600 - 1730	Plenary Session I Chairman: Prof. Cindy Test or No Test? Prof. Michael Irwin Premedication - In or Dr. Jeffrey Kua			
	Perioperative Haemoo Prof. Gavin Joynt	lynamic Goals		
1730 - 1830	Perioperative Haemoo	dynamic Goals		
1730 - 1830 1830 - 1930	Perioperative Haemoo Prof. Gavin Joynt	dynamic Goals		

# Sunday 10 September 2000

0730-0800	Registration				
0800-0900	Morning Panel Discussion - Medical Liability vs Litigation Chairman: Dr. T. W. Lee				
	Panel: Prof. Douglas Jones from Richard Butler International Law Firm Representative from HA / Representative from MPS				
0900-1030	Plenary Session II Chairman: Dr. C. K. Chan				
	Preemptive Analgesia: Fact or Fallacy? Prof. Phillip Bridenbaugh				
	Anaesthetic Techniques - A Look into t Prof. Tony Gin	he Future			
	Continuous Spinal Anaesthesia - Is The Prof. Mathieu Gielen	re a Role in Anaesthesia and Postoperative Analgesia			
1030-1100	Coffee Break				
1100-1230	Free Paper Session Chairman: Prof. David Chung	Free Paper Session for Trainees Chairmen: Prof. M. R. C. Rodrigo Dr. Matthew Chan			
		Judges: Prof. Tony Gin / Prof. K. F. Ng			
1230-1400	Lunch				
1400-1530	Debate Chairman: Dr. C.T. Hung	ICU Symposium - Ventilator Synchrony and Weaning Dr. Neil MacIntyre			
	Panel: Dr. Eddie Cheam Prof. Michael Irwin Vs Dr. Phoebe Mainland Prof. Warwick Ngan Kee				
1530-1600	Coffee Break	4.			
1600-1700	Plenary Session III Chairman: Dr. Tom Buckley				
	Evaluation and Management of Postop Dr. Neil MacIntyre	erative Respiratory Insufficiency			
	Intermittent Renal Replacement Thera Dr. Ian Tan	py for the Critically Ill - sans peur et sans reproche			
	Post-Anaesthetic Care - How Far Sh Dr. C.T. Hung	nould We Go?			
1700-1715	Closing Ceremony				
1730-1930	Wine Tasting				

# **Other Meetings**

# Hong Kong Academy of Medicine - Second International Congress 香港醫學專科學院第二屆國際會議

# MEDICAL ADVANCES AND INFORMATION IN THE NEW MILLENNIUM 資訊新世代 醫學創紀元

Date

: 2 - 5 November 2000

Venue

The Hong Kong Academy of Medicine Jockey Club Building

99 Wong Chuk Hang Road Aberdeen, Hong Kong SAR

**PRC** 

Plenary lectures, inter-disciplinary symposia and computer workshops will be organized during the Congress. Renowned overseas and local speakers have been invited to speak on the following Inter-disciplinary symposia topics:

- Internet Medicine, Health Portals & Medical Education
- Comprehensive Blood Conservation
- Minimal Invasive Surgery
- · Assessment of Personal Injuries
- Ambulatory Care
- Continuous Professional Development
- Palliative Medicine
- Disaster & Pre-hospital Medicine
- Problems of Aging
- Recent Specialty Advances
- Effective Primary Care
- Genetic Medicine

- Health Policy & Financing
- Recent Advances in Medical Diagnosis
- Clinical Information Systems & Telemedicine
- Image Guided Interventional Procedures
- Pain Control
- Occupation, Environment & Health
- Recent Advances in Psychiatry
- Quality Assurance in Medical Practice
- Infectious Disease
- Chinese Medicine Policy & Practice

Hong Kong Academy of Medicine - Second International Congress

### **REGISTRATION FEES**

	Before 1 August 2000	After 1 August 2000
HKAM Fellows	HK\$1,700	HK\$2,000
Local Trainees	HK\$1,200	HK\$1,500
Paramedical Group*	HK\$1,200	HK\$1,500
Other Local Delegates	HK\$2,200	HK\$2,500
Overseas Delegates	US\$300	US\$350
Accompanying Persons	US\$100	US\$100

<sup>\*</sup>Paramedical Group - restricted to nurses, allied health professionals and medical students only.

For enquiries, registration / abstract forms, please contact:

Fax: (852) 2871 8898

Ms Rita Chau / Ms Ingrid Leung

IMPORTANT DEADLINES:

Tel: (852) 2871 8787

E-mail: hkam@hkam.org.hk

HKAM Website: http://www.hkam.org.hk

Abstract Submission - 1 June 2000 Discounted Registration - 31 July 2000 Hotel Reservation - 1 September 2000

#### NIMBEXTM ABRIDGED PRESCRIBING INFORMATION:

A sterile solution containing 2 mg and 5mg cisatracurium (bis-cation) per mL, as cisatracurium besylate, without an antimicrobial preservative, supplied in an ampoule and vial respectively.

#### INDICATIONS

NIMBEX is an intermediate-duration, non-depolarising neuromuscular blocking agent for intravenous administration. NIMBEX Injection is indicated for use during surgical procedures including cardiac surgery, other procedures and in intensive care. It is used as an adjunct to general anaesthesia, or sedation in the Intensive Care Unit (ICU), to relax skeletal muscles, and to facilitate tracheal intubation and mechanical ventilation.

#### DOSAGE AND ADMINISTRATION

Use by intravenous bolus injection: Dosage in adults: Tracheal Intubation. The recommended intubation dose of NIMBEX Injection for adults is 0.15 mg/kg administered rapidly over 5 to 10 seconds. This dose produces good to excellent conditions for tracheal intubation 120 seconds following injection. High doses will shorten the time to onset of neuromuscular block. Maintenance. A dose of 0.03 mg/kg provides approximately 20 minutes of additional clinically effective neuromuscular block during opioid or propofol anaesthesia. Consecutive maintenance doses do not result in progressive prolongation of effect. Spontaneous Recovery. Once spontaneous recovery from neuromuscular block is underway, the rate is independent of the NIMBEX dose administered. During opioid or propofol anaesthesia, the median times from 25 to 75% and from 5 to 95% recovery are approximately 13 and 30 minutes, respectively. Reversal. Neuromuscular block following NIMBEX administration is readily reversible with standard doses of anticholinesterase agents. The mean times from 25 to 75% recovery and to full clinical recovery (T4:T1 ratio greater or equal to 0.7) are approximately 2 and 5 minutes respectively, following administration of the reversal agent at an average of 13% T1 recovery.

Dosage in paediatric patients aged 2 to 12 years: The recommended initial dose of NIMBEX Injection in children aged 2 to 12 years is 0.1mg/kg administrated over 5 to 10 seconds. A dose of 0.1mg/kg has a faster onset time, a shorter clinically effective duration and a faster spontaneous recovery profile than those observed in adults under similar anaesthetic conditions. Tracheal Intubation. Although has not been specifically studied in this group, onset is faster than in adults and therefore intubation should also be possible within 2 minutes of administration. Maintenance. A dose of 0.02 mg/kg provides approximately 9 minutes of additional clinically effective neuromuscular block during halothane anaesthesia. Consecutive maintenance doses do not result in progressive prolongation of effect. Spontaneous Recovery. During opioid anaesthesia, the median times from 25 to 75% and from 5 to 95% recovery are approximately 10 and 25 minutes, respectively. Reversal. Neuromuscular block following NIMBEX administration is readily reversible with standard doses of anticholinesterase agents, The mean times from 25 to 75% recovery and to full clinical recovery (T4:T1 ratio greater or equal to 0.7) are approximately 2 and 5 minutes respectively, following administration of the reversal agent at an average of 13% T1 recovery.

Use by intravenous infusion: Dosage in adults and children aged 2 to 12 years: Maintenance of neuromuscular block may be achieved by infusion of NIMBEX Injection. An initial infusion rate of 3 mcg/kg/min (0.18 mg/kg/hr) is recommended to restore 89 to 99% T1 suppression following evidence of spontaneous recovery. After an initial period of stabilisation of neuromuscular block, a rate of 1 to 2 mcg/kg/min (0.06 to 0.12 mg/kg/hr) should be adequate to maintain block in this range in most patients.

Infusion Delivery Rate of NIMBEX Injection 2 mg/mL.

Patient Weight (kg)	Dose (mcg/kg/min)			Infusion Rate	
	1.0	1.5	2.0	3.0	
20	0.6	0.9	1 <sub>∞</sub> 2	1.8	mL/hr
70	2.1	3.2	4.2	6.3	mL/hr
100	3.0	4.5	6.0	9.0	mL/hr

Dosage in children aged less than 2 years: No dosage recommendation for paediatric patients under 2 years of age can be made until further information becomes available. Dosage in elderly patients: No dosing alterations are required in elderly patients.

Dosage in patients with renal impairment: No dosing alterations are required in patients with renal failure.

Dosage in patients with hepatic impairment: No dosing alterations are required in patients with end-stage liver disease.

Dosage in patients with cardiovascular disease: NIMBEX Injection has been administrated by rapid bolus injection in doses of up to 0.1 mg/kg to patients undergoing coronary artery bypass graft (CABG) surgery, and was not associated with clinically significant cardiovascular effects.

Dosage in Intensive Care Unit (ICU) patients: An initial infusion rate of NIMBEX Injection of 3 mcg/kg/min (0.18 mg/kg/hr) is recommended for adult ICU patients. There may be wide interpatient variation in dosage requirements and these may increase or decrease with time. In clinical studies the average infusion rate was 3μg/kg/min [range 0.5 to 10.2μg/kg (body weight)/min (0.03 to 0.6 mg/kg/hr)]. The median time to full spontaneous recovery following long-term (up to 6 days) infusion of NIMBEX Injection in ICU patients was approximately 50 minutes.

Infusion Delivery Pate of NIMBEY Injection 5 mg/ml

Patient Weight (kg)	D	ose (mo	g/kg/mi	n)	Infusion Rate
	1.0	1.5	2.0	3.0	
70	0.8	1.2	1.7	2.5	mL/hr
100	1.2	1.8	2.4	3.6	mL/hr

The recovery profile after infusions of NIMBEX Injection to ICU patients is independent of duration of infusion.

#### Instructions for use:

Diluted NIMBEX Injection is physically and chemically stable for at least 24 hours at 5°C and 25°C at concentrations between 0.1 and 2.0 mg/mL in the following infusion fluids, in either polyvinyl chloride (PVC) or polypropylene containers:

- Sodium Chloride (0.9% w/v) Intravenous Infusion.
- Glucose (5% w/v) Intravenous Infusion.
- Sodium Chloride (0.18% w/v) and Glucose (4% w/v) Intravenous Infusion.
- Sodium Chloride (0.45% w/v) and Glucose (2.5% w/v) Intravenous Infusion.

However, since the product contains no antimicrobial preservative dilution should be carried out immediately prior to use, administration should commence as soon as possible thereafter and any remaining solution should be discarded.

NIMBEX Injection is not chemically stable when diluted with Lactated Ringer's Injection. Where other drugs are administered through the same indwelling needle or cannula as NIMBEX Injection, it is recommended that each drug be flushed through with an adequate volume of a suitable intravenous fluid, eg, Sodium Chloride Intravenous Infusion 0.9% (w/v)

Since NIMBEX Injection is stable only in acidic solutions it should not be mixed in the same syringe or administered simultaneously through the same needle with alkaline solutions, eg, sodium thiopentone. It is not compatible with ketorolac trometamol or propofol injectable emulsion.

#### CONTRA-INDICATIONS

NIMBEX Injection is contra-indicated in patients known to be hypersensitive to cisatracurium, atracurium, or benzenesulfonic acid.

#### SPECIAL WARNINGS AND SPECIAL PRECAUTIONS FOR USE

Great caution should be exercised when administering NIMBEX Injection to patients who have shown allergic hypersensitivity to other neuromuscular blocking agents since cross-reactivity between neuromuscular blocking agents has been reported. NIMBEX Injection has no clinically significant effect on heart rate and will not counteract the bradycardia produced by many anaesthetic agents or by vagal stimulation during

Patients with myasthenia gravis and other forms of neuromuscular disease have shown greatly increased sensitivity to non-depolarising blocking agents. An initial dose of not more than 0.02 mg/kg NIMBEX Injection is recommended in these patients. NIMBEX is hypotonic and must not be administered into the infusion line of a blood transfusion.

#### INTERACTION WITH OTHER MEDICAMENTS AND OTHER FORMS OF INTERACTION Increased effect:

#### Anaesthetics:-

- Volatile agents such as enflurane, isoflurane and halothane.
- Ketamine.
- Other non-depolarising neuromuscular blocking agents.

## Other drugs:

- Antibiotics
- Anti-arrhythmic drugs
- Diuretics
- Magnesium salts
- Lithium salts
- Ganglion blocking drugs: trimetaphan, hexamethonium

#### Decreased effect:

Prior chronic administration of phenytoin or carbamazepine.

Prior administration of suxamethonium has no effect on the duration of neuromuscular block following bolus doses of NIMBEX Injection or on infusion rate requirements.

### PREGNANCY AND LACTATION

NIMBEX Injection should be used during pregnancy only if the expected benefit to the mother outweighs any potential risk to the foetus.

It is not known whether cisatracurium or its metabolites are excreted in human milk.

#### **EFFECTS ON ABILITY TO DRIVE AND USE MACHINES**

This precaution is not relevant to the use of NIMBEX Injection. However the usual precautions relating to performance of tasks following general anaesthesia still apply.

#### **UNDESIRABLE EFFECTS**

No adverse experiences occurred during the clinical development programme that were considered to be reasonably attributable to NIMBEX Injection.

Adverse experiences considered possibly attributable occurred with a frequency of less than 0.5%. These were cutaneous flushing or rash, bradycardia, hypotension and bronchospasm.

#### SPECIAL PRECAUTIONS FOR STORAGE

Store between 2°C and 8°C.

Protect from light.

Do not freeze.

#### PACKAGE

For 2mg/mL, 5mg/2.5ml x 5 ampoules and 10mg/5ml x 5 ampoules are available. For 5mg/mL, 150mg/30ml x 1 vial is available.

NIMBEX™ is a registered trademark of Glaxo Wellcome Group of companies. Further information is available on request from:

# **GlaxoWellcome**

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