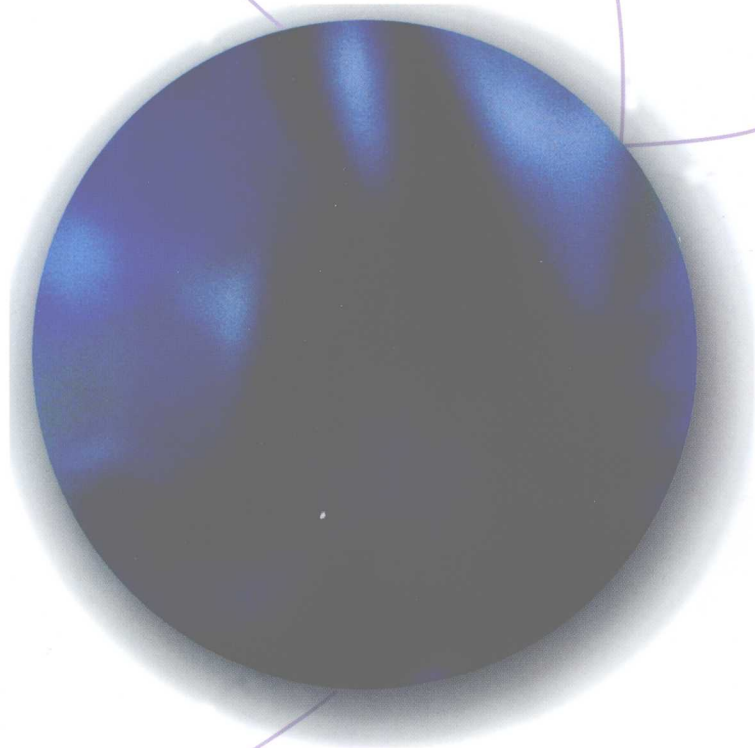


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循证临床麻醉学

Evidence-Based Practice of Anesthesiology

 人民卫生出版社

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此书敬献给我的妻子卢征奇，儿子胡枫凌、胡银凌，以及我的父母胡威耀和谢庭云，感谢他们的支持、帮助和理解。同时，感谢中国同行、美国华人麻醉医学会（American Chinese Society of Anesthesiology, CASA）成员及所有给本书帮助的人们。

Ling Qun Hu（胡灵群）

译者序

有史书记载的中国麻醉学源于古代名医华佗（公元110~207）。他的麻沸散所包含的理念，即遗忘、镇痛、肌松、主张多种药物的平衡使用，与当今麻醉学的理念有着惊人的一致性。在美国，麻醉为医学界尊敬和推崇追溯至 Crawford Long 医师首次成功使用乙醚进行全身麻醉手术的1842年3月30日。为纪念这项特殊的医学发明，1933年起每年3月30日被定为美国医师节。163年后，也就是美国麻醉医师学会（ASA）成立100周年的2005年6月21日，《华尔街日报》特别发表了专栏文章阐述了麻醉学在整个医学领域中独一无二的地位*，美国麻醉界的不断努力和反复临床循证，显著降低了原本居高不下的并发症率和死亡率，它的发展模式成了当今美国其他医学领域安全医疗的楷模。

本书不是一本中国同仁常见的教科书或手册，它旨在指导住院医师如何以正确的途径获取知识、更新知识以及临床运用这些知识。本书的英文版是包括美国西北大学芬伯格医学院等著名学府麻醉专业训练中的必读书。相信中文版的读者们在阅读领悟本书精华的同时，能够了解到当今世界特别是美国麻醉学的现状和动态，在华佗的故土上，为人类医学再树丰碑。

这本《循证临床麻醉学》涉及了术前准备和检查、术中监测和处理、术后恢复和镇痛三个阶段。本书跨越各个年龄组的麻醉，也包括了重症医学在内的各麻醉亚科。它的读者群将是广泛的，尤其适用于内

科或外科负责围手术期处理的医师、麻醉医师和重症监护医师。无论是临床实践、麻醉教学，还是医学研究，读者们都将体会到它的价值。

本书由中国麻醉医师分工翻译，随后全部由美国华人麻醉专业执照医师（Board-Certified Anesthesiologists）校对。由于中美麻醉领域现实中存在的差异，本书在翻译基础上进行了一定程度的编辑，既保证医学术语翻译的标准和字词语义表达的精确，也让中文读者能联系到自己的临床实践便于理解。它是中美华人麻醉医师共同无偿劳动的结晶，为中外医学专家通力翻译合作开创了先例，也是翻译在形式上的一种尝试。

在本书出版之际，我要特别感谢人民卫生出版社的大力支持、中国麻醉界同仁的通力合作和美籍华人麻醉专家的无私奉献。我为翻译小组成员的使命感、迫切感和敬业精神所感动和激励。中方主译、浙江大学医学院附属邵逸夫医院的周大春主任和他的同事、助理编辑严春燕医师，花费了大量的时间和精力，使得本书得以在短时间内和大家见面，没有他们付出，结果是不可想象的。浙江大学医学院附属第二医院的周海燕主任和四川大学医学院华西医院的左云霞主任给了本书很大的帮助，浙江大学医学院附属第二医院、助理编辑陈祥明医师的最后整理，为出版增色不少。我在此深表谢意。

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* JOSEPH T. HALLINAN, "Once Seen as Risky, One Group of Doctors Changes Its Ways" THE WALL STREET JOURNAL, Staff Reporter of June 21, 2005

前言

近十年来,循证医学一词颇为火热,其焦点是如何在医学实践中采用“最佳方案”来改进对病人的医疗。具体来说,就是通过系统地复习文献,也即“循证”,指导医务工作者运用最有效的治疗。然而,必须注意到在临床试验和研究的循证过程中产生的证据会有各种形式,产生这些信息的能力也受很多因素的影响。就以产生最高证据价值的研究形式——临床随机对比试验而言,该形式的证据内在有效性很高,但它的外延有效性却有可能受研究人群(入选标准和排除标准)的限制,研究的治疗方案也可能与实践脱节。通常认为,组群队列(Cohort)研究产生的证据价值较低,但这类证据可能是现在仅有的。虽然很多指南编写委员会认为组群队列研究所提供的信息不足以指导临床实践,但在其他形式证据出现之前,它们对临床工作还是有参考价值的。总之,认识到证据及证据的不同形式,对指导临床工作是十分重要的。

循证医学发展的一个重要产物就是形成临床指南和临床建议。美国麻醉医师协会已经制定了一套健全的方法和程序来制定临床指南。这些临床指南强调了临床随机研究对临床麻醉的巨大帮助,只是还局限于各专题所涉及的范围。其他非麻醉协会制定的指南对我们的临床工作也很有帮助。例如美国心脏病学会/美国心脏协会的围手术期心血管评估指南常用来决定非心脏手术前心血管评定的范围。迄今尚有很多方面仍缺乏文献的涵盖,传统的文献综述和书籍中的专题章节也常常不是为了回答临床问题而编写的。

编写这本《循证临床麻醉学》的目标是用一个结构性的模式来看待许多这类问题。各章的作者将提供所述问题的背景或概况,整理出可供选择的治疗方案,回顾归纳证据,指明尚有争论的领域,列出现有

的临床指南,并最终提出自己的见解。他们对现有证据的描述方法,会因证据本身的深度和广度而有所不同,但总的原则是为读者提供一个基准,使读者在理解文献内容的基础上,针对自己在围手术期面临的临床疑难问题,得出解决问题的方案。本书所列的专题涉及面很广,但仍不能盖全。随着时间的推移某些专题的重要性也可能随之变化。因此,如有新的专题请推荐给我,以便我们再版时考虑。还有,证据本身也在不停地变化,我们必须认识到新证据的出现可能会改变原有的结论。每个章节中指出的未确定领域给各位热衷于提出问题和解决问题的学者提供了肥沃的土地,有待于大家的开垦和评估。

我要衷心地感谢许许多多为本书编写和出版提供帮助的人。我的行政助理 Juanita Taylor 工作非常仔细,把由许多作者分写的许多章节、专题的进展情况整理得既完整又及时,为本书的按时完成起到了不可低估的作用。我还要感谢约翰霍普金斯(John Hopkins)医院麻醉科围手术期临床研究小组的 Andrew Rowlingson、Christine Atchison、Elizabeth White、Amy Westermann 和 Ann Cartarius,在我集中精力编写这本书时,他们使我的临床研究得以继续进行而不受影响。我也非常感谢艾思维尔医学科学出版社(Elsevier Health Science)的 Allen Ross 对此书构思的帮助。感谢我的副主编 Natasha Andjelkovic 和编辑 Agnes Byrne 和 Denise LeMelledo,是他们帮助我共同编写了本书。

本书旨在既有新意又有指导价值,帮助读者理解现有的证据,指导解决临床疑难问题。我从供稿的专家那里学到了很多,正努力地把这些循证医学运用到临床实践中去,使我的病人得到更好的医疗。我也希望读者们的病人也会从中受益。

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(周大春 译)

(Ling Qun Hu 校)

序

这本书正是我想读的，而且就在我要读的时候出现了。我浏览了 Fleisher 医师选择的问题和专题，的确它们都是我最想解决的难题，其中不少问题是每天困扰着我的。作者没有简单地提出问题，罗列证据，而是让读者在进退两难的抉择中，阐述了他们会做什么，以及为什么，将该领域的专家如何应对这些局面陈述出来，而不是束缚我们的读者。显然是 Fleisher 医师精心挑选了他的作者队伍，使得他们能不偏不倚地代表他们所在领域的专家。他的这本书编得太出色了（我的评价可能有些偏颇。因为他是我《麻醉实践基础》（Essence of Anesthesia Practice）的合编人，我知道他在那本书上的出色贡献）。

为什么说这是一本出色的著作？拿出其中的一个章节便可见一斑，Easley 和 Maxwell 医师在“呼吸道感染的患儿该做择期手术吗？”中，不仅提出了问题，并立即提供了马上手术会增加危险性的证据，延期可减少手术危险性的证据。为避免读者在实际处理

时徘徊不决，他们直截了当地提供了他们的意见：上呼吸道感染伴有症状的，手术延期 2~4 星期；有急性下呼吸道感染的，延期 4~6 星期。作者明确申明这只是个人意见，现有的证据尚不足以归纳出结论性的回答。随后，提供参考文献以便人们对这一问题深入探讨。

本书对私人执业者是一个极好的学习工具，从中知道专家们会如何处理某些特定的临床问题。对正在受训的住院医师及他们的教员们也是一本极好的教科书，可以学习如何处理各种各样的重要问题。从如何处理围手术期低体温，到肌松药的选择是否会影响预后，从如何预防周围神经损伤，到睡眠呼吸暂停综合征病人术后是否该进 ICU 等等。

这本书我打算买两册，一册放在家，为准备第二天的病人用；另一册放在单位里，它将是我手术室带教中极其重要的教材。它是我们教学材料中的上佳之作，希望读者您也会像我一样喜欢这本书。

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计量单位换算表

本书为反映其英文原版之风格，并且避免反复换算带来不必要的计算错误，保留了部分英制计量单位。鉴于我国推广使用法定计量单位之要求，现将这些单位与法定计量单位的换算关系列表如下。本表仅供参考。

英制单位 (符号)	法定计量单位 (符号)	换算关系
埃 (Å)	米 (m)	$1\text{Å}=10^{-10}\text{m}$
盎司 (常衡) (oz)	克 (g)	$1\text{oz}=28.35\text{g}$
盎司 (药衡) (oz)	克 (g)	$1\text{oz}=31.10\text{g}$
盎司 (美液) (oz)	升 (L)	$1\text{oz}=0.02957\text{L}$
盎司 (英液) (oz)	升 (L)	$1\text{oz}=0.02841\text{L}$
磅 (lb)	克 (g)	$1\text{lb}=453.59\text{g}$
标准大气压 (atm)	帕 (Pa)	$1\text{atm}=101325\text{Pa}$
达因 (dyn)	牛 (N)	$1\text{dyn}=10^{-5}\text{N}$
打兰 (美液) (dr)	升 (L)	$1\text{dr}=0.0037\text{L}$
打兰 (英液) (dr)	升 (L)	$1\text{dr}=0.00355\text{L}$
当量 (Eq)	摩尔 (mol)	$1\text{Eq}=1\text{mol}$ (1价离子)
当量 (Eq)	摩尔 (mol)	$1\text{Eq}=0.5\text{mol}$ (2价离子)
当量 (Eq)	摩尔 (mol)	$1\text{Eq}=1/3\text{mol}$ (3价离子)
尔格 (erg)	焦 (J)	$1\text{erg}=10^{-7}\text{J}$
辐透 (ph)	勒 (lx)	$1\text{ph}=10^4\text{lx}$
格令 (gr)	克 (g)	$1\text{gr}=0.064799\text{g}$
毫米汞柱 (mmHg)	帕 (Pa)	$1\text{mmHg}=133.322\text{Pa}$
华氏度 (°F)	开/摄氏度 (K/°C)	$1\text{°F}=5/9\text{K}(\text{°C})^*$
加仑 (美) (gal)	升 (L)	$1\text{gal}=3.785\text{L}$
加仑 (英) (gal)	升 (L)	$1\text{gal}=4.546\text{L}$
居里 (Ci)	贝可 (Bq)	$1\text{Ci}=3.7\times 10^{10}\text{Bq}$
卡 (Cal)	焦 (J)	$1\text{Cal}=4.18\text{J}$
夸特 (qr)	千克 (kg)	$1\text{qr}=12.70\text{kg}$
夸脱 (美) (qt)	升 (L)	$1\text{qt}=0.946\text{L}$
夸脱 (英) (qt)	升 (L)	$1\text{qt}=1.137\text{L}$
拉德 (rad)	戈 (Gy)	$1\text{rad}=10^{-2}\text{Gy}$
雷姆 (rem)	希 (Sv)	$1\text{rem}=10^{-2}\text{Sv}$
厘米水柱 (cmH ₂ O)	帕 (Pa)	$1\text{cmH}_2\text{O}=98\text{Pa}$
哩 (mi)	米 (m)	$1\text{mi}=1609\text{m}$
伦琴 (R)	库每千克 (C/kg)	$1\text{R}=2.58\times 10^{-4}\text{C/kg}$
码 (yd)	米 (m)	$1\text{yd}=0.914\text{m}$
品脱 (美) (pt)	升 (L)	$1\text{pt}=0.473\text{L}$
品脱 (英) (pt)	升 (L)	$1\text{pt}=0.568\text{L}$
蒲式耳 (美) (bu)	升 (L)	$1\text{bu}=35.24\text{L}$
蒲式耳 (英) (bu)	升 (L)	$1\text{bu}=36.37\text{L}$
英尺 (ft)	米 (m)	$1\text{ft}=0.3048\text{m}$
英寸 (in)	米 (m)	$1\text{in}=0.0254\text{m}$

* 此为温差度量的换算。对于温度而言可按下式换算：摄氏度=5/9 (华氏度-32)。

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