

第8版

临床药物治疗学

APPLIED THERAPEUTICS
THE CLINICAL USE OF DRUGS

骨关节疾病

原著 Mary Anne Koda-Kimble

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主译 王秀兰 李 强 张淑文

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Mary Anne Koda-Kimble, et al.

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《临床药物治疗学》(Applied Therapeutics)是世界上高水平的经典教科书。自1975年问世以来,随着医学、药学及各学科领域新知识、新技术的快速发展,每3~5年更新再版,每次再版都增补了很多新的内容。目前本书不仅是美国等国家药学院临床药学教育的共用教科书,也是许多临床工作者实用的参考书,人民卫生出版社引进本书,对我国临床药学教育的发展具有很好的参考价值。

本书第8版的内容广泛,覆盖了医药学各学科领域。不但包括了当前医、药等各方面的最新信息,而且知识融会贯通,同时采用了大量临床病例,列举治疗方案、合理用药及治疗效果评估,使理论与实践相结合,突出了如何进行正确的临床思维,对培养临

床医学生、药学生、临床药剂师及其他临床工作者获得解决临床实际问题的能力非常有帮助。真诚希望《临床药物治疗学》中文版的问世,对广大医学生、药学生及临床医师乃至我国临床药学教育的发展有所裨益。

本书翻译工作由主要来自首都医科大学附属北京友谊医院的专家、教授组成的翻译委员会完成,工作中得到美国肯塔基大学药学院临床药学博士蔡立坚先生的指导。本书翻译工作开始前大家开会制定了统一标准,翻译力求忠实原著,保证质量。这本近800万字的著作,译者花费了近一年的工作时间,付出了很大的努力。译著经过多次审校,总体翻译水平较高;然而错误在所难免,欢迎广大同仁对本书提出宝贵意见。



于北京

第8版前言

《临床药物治疗学》一书自第1版问世以来已近30年了，案例教学和以问题为中心的教学方法，并结合最新的临床信息是本著作编写革新的根本原则，最新版的编排格式保持着其完整性。编作者们在不断发展变化的医疗环境中，尽量提供给读者当前推荐使用的最新的治疗方案。人类免疫缺陷病毒(HIV)在1975年尚未闻晓，但是在今天，艾滋病的发展速度和新的治疗策略，连同其他新知识、新技术激励着最新版的出版与发行。本书再版增加了新的章节(人文关怀、临终关怀治疗和戒烟)，每一章都重新强调辅助疗法、替代疗法以及最新的治疗方案。

医务工作者对临床用药做出有根据的决定是治疗成功的关键。随着人口的老龄化，更多患者患有多种慢性疾病。有关病理生理和药物特性新知识的不断发展，拓宽了我们使用药物治疗的途径，于是在许多病例的治疗中采用联合用药已经成为常规疗法。但是在另一方面，联合用药增加了患者受到药物副作用伤害的几率。再者，最新统计显示

2002年美国医疗卫生开发费用达到16 000亿美元，处方药费用超过1 600亿美元。即使在不断强化的监控下，仍然是医疗卫生费用中增长最快的部分。重要立法为医疗服务接受者提供使用处方药物的益处，进而增加了对处方药的需求，与此同时也会增加相应的经济负担。我们希望本书读者更合理地治疗他们的患者和做出决定，以便保证最有效地利用有限的时间和医疗资源。

本书与以前的版本一样，作者们在文中给出了各种临床病例，以引导和促使读者在联系特定的临床情况下综合应用治疗原则。我们亦尽量为学生和医务人员提供作为临床医生评价和处理治疗问题的思路，因此他们能够逐步培养和发展自己解决问题的临床思维能力和技巧。尽管作者们非常仔细地选择和推荐与现代标准和可靠的文献相一致的治疗方法，我们仍然建议读者，当处理新的和不熟悉的药物时，参考查询一些更适当的信息。

第7版前言

第7版《临床药物治疗学》最后一章已经送交出版商，我们庆祝此书的完成。同时对为此书付出辛勤劳动的各位作者、编辑、校对和出版者致以诚挚的谢意。虽然此书的出版工作已近结束，但我们清楚目前卫生保健事业存在着巨大压力，许多工作亟待我们去完成。在过去的十年中，护士、药剂师人员短缺、医务人员面对新技术飞速发展的挑战、医疗费用的日益增加以及医疗服务的相对不足，这些仍持续增长的不利因素与经济的迅速发展同步存在。与此同时，卫生行业也在尽一切努力来寻找应对费用增加、提高医疗服务质量的良策，以降低医疗费用、提高服务质量，最终满足（乃至超出）公众日益增长的健康需求。随着老龄人口的增加，人们对医疗保健的需要更多，因而对医疗安全和避免差错（包括治疗差错）措施的保障体系的需求迫在眉睫。

医疗事业的未来最终寄托在下一代医务工作者身上。我们必须要选择最出色、最聪明的继任者，我们还有责任培养他们能够面对明日的挑战。现在，随着人们对疾病认识的不断深入以及新药的不断出现，我们迫切需要如神经生物化学、遗传学、基因学、医

学及公共卫生领域进一步的研究成果。我们希望第7版《临床药物治疗学》能够具有显著的临床思路的特点，有助于医学生获得解决临床问题的技能，我们希望通过本书能使

学生将所学的知识融会贯通，达到合理使用药物的目的。本版所有章节都进行了修订和更新，以反映我们对药物认识的更新，及这种认识更新在临床的应用。与前一版相同，我们提倡作者在书中提供实际病例，以启发读者针对特定的病例，将一般的药物治疗原则与具体患者有机结合起来；我们努力提供给医学生和临床医生在解决治疗问题时思路的概要，以使

他们开始形成自己的解决问题的技能体系。本书许多内容来自每位作者本人的临床经验，对每一位读者来说，对一特定见解应结合具体的临床实际和相应学科的发展来评价其意义。虽然书中的治疗方案是作者们依据现行标准和可查到的文献谨慎推荐的，我们还是要求学生或从业者，在使用新药或不熟悉的药物时，要从多方面获取相关的信息和资料。

B. Joseph Guglielmo

Mary Anne Koda-Kimble

Wayne A. Kradjan

Lloyd Yee Young

2000年10月

（郑玉译）

第1版前言

在过去的十年里，药剂师的作用日益突出。在卫生保健实施中药剂师越来越多地起着举足轻重的作用，并对医疗质量有重要的影响。M. Silverman 和 P. Lee 在《药物、利益和政策》¹一书中充分地评估了现在及将来药师在药物、利润、政策方面所起的作用：

“正是药剂师，在指导临床医师开出合理处方上起到重要作用；他可以帮助临床医师如何对具体的患者在恰当的时间，使用合理、适量的药物，并且考虑到治疗价格的因素。同时他还能帮助患者知道怎样、何时、为什么使用处方药和非处方药品。”

“正是药剂师，他受过高级培训，成为了药品方面的专家；他有很好的机会掌握此领域的最新知识及发展动态；他对于临床医生和患者来说都是一位知识丰富的顾问。正是药剂师，他能够在防止药物错用、滥用和不合理处方几方面起到关键作用。”

许多药学院已经在课程上做了大量的改动以使其毕业生能够胜任其职责。虽然传统药学课程讲授关于药物的特性等知识，而没有结合患者实际阐述药物的治疗作用。同样，传统药学和医学教科书，也没有为医生提供对特定患者在药物选择及剂量确定方面所需的足够信息。临床医师在使用药物前，必须考虑到患者的年龄、肝肾功能、目前病情及用药和是否存在过敏等；另外，还必须考虑药物的生物利用度、药代动力学、药物效用和毒性、风险与得益的比率以及费用等因素。

我们业已发现，学生们遇到的最大困难是，很难将所学习的各种知识融会贯通，把最安全、最合理的药物应用于具体患者。我们还看到，虽然学生能够详述一种药物副作用，但在具体患者身上很难做到正确识别或监测其不良反应。

本书取材于加州大学和华盛顿州立大学的临床药学课程，其主旨是使学生提高临床实践学习的效果。课堂讨论可作为疾病过程病理生理和医学治疗理论讲授的补充，讨论中，学生们需要回答临床医生经常提出的问题，并需要对用药进行评价及做出其他恰当选择。本书和课堂讨论的初衷是使学生掌握药物治疗的相关因素，诸如一种特定药物能否解除患者的症状、药物间相互作用的临床意义、为什么一种药物没有到达血液治疗浓度；以及多种疾病患者的药物剂量等。

在我们的课程中成功应用了课堂讨论的经验是本书采用这种框架的主要决定因素：由病例营造的实际临床背景及提出一些有关治疗的问题，都附有详尽的参考答案。

本书许多内容来自作者个人的临床经验，对每一位读者来说，对一特定见解应结合具体的临床实际和相应学科的发展来评价其意义。虽然本书中治疗方法是作者依据现行标准和可查文献所谨慎推荐的，我们还是要求学生或从业者，在使用新药或不熟悉的药物时，还要从多方面获取相关的信息。

郑玉 译

¹M. Silverman 和 P. Lee 《药物，利益和政策》(Pills, Profits and Politics) 一书由加利福尼亚大学出版社于 1975 年出版。

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) | $1 \text{ °F} = 5/9 \text{ K (°C)}$ * |
| 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)。