

Textbook of the  
**Neurogenic Bladder**  
Adults and Children

# 神经源性膀胱

■ 著者 Jacques Corcos Erik Schick  
■ 主译 何舜发 王 平

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## 主译简介

何舜发，医学博士，澳门仁伯爵综合医院泌尿外科主任。曾在丹麦 Arhus University 附属医院 Skejby Sygehus Hospital 接受尿流动力学培训。2000 年在亚洲率先开展“骶神经调节”治疗神经源性膀胱和下尿路功能障碍手术；2006 年、2007 年先后在成人及小儿腹腔镜手术方面有所创造发明，并就神经泌尿、腹腔镜和前列腺癌诊治方面在国际泌尿外科杂志发表多篇文章。2008 年获聘为山西医科大学泌尿外科兼职教授。因对医学和社会的贡献而获得 2009 年度顾氏和平奖(Gusi Peace Prize)。先后创办澳门泌尿外科学会和澳门医疗人员协会，并任会长。曾任多届中华医学会泌尿外科分会尿控学组委员。现任中国残疾人康复协会脊髓损伤专业委员会委员、国际脊髓学会中国脊髓损伤学会会员、中国医师协会泌尿外科分会委员、亚洲泌尿外科学会常委、中国《泌尿外科杂志》(电子版)编委、国际《腔内泌尿外科杂志》中文版编委、《International Journal of Urology》编委。

王平，教授，博士生导师，中国医科大学附属第四医院院长，国务院政府特殊津贴获得者。中国医师协会泌尿外科分会常务委员、辽宁省抗癌协会泌尿肿瘤专业委员会主任委员、中华泌尿外科学会辽宁分会副主任委员、《中国实用外科杂志》编委。作为北京大学泌尿外科培训学院“将才工程”学员曾五次赴美国 Johns Hopkins Hospital 和 Miami University 培训。从事泌尿外科工作近 30 年，在膀胱功能障碍疾病方面做了大量研究，先后承担国家自然科学基金课题 2 项，省级科研课题 10 余项，先后获得辽宁省科技进步二等奖和沈阳市科技进步一等奖。目前已在各类核心期刊上发表论著数十篇。

## 内容提要

本书系当今神经泌尿外科具有世界先进水平的前沿专著,包括正常泌尿道、下尿路功能性病理学,与神经源性膀胱发生相关的神经病物理学,神经源性膀胱功能障碍评估、分类、治疗、综合治疗、并发症、预后等九个部分,共 63 个章节,从基本知识如正常下尿路的胚胎形成、解剖结构和生理学,到发病机制、最新诊疗手段等,均有详细描述。本书涵盖了成年人及小儿下尿路神经泌尿外科学的所有领域,水平高、内容全、资料齐,是一部有关神经源性膀胱的最新、精确、规范化且权威的参考资料。本书可作为临床泌尿外科医师,尤其是神经泌尿外科医师必备的教科书和工具书。

## 译者的话

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神经泌尿外科学是与多个医学临床学科相关的“交界学科”，除了与泌尿外科、神经内科、神经外科相关，还与骨科、普通外科有关联。过去四五十年间，基于神经学基础研究及尿流动力学检查的发展，神经泌尿外科在国外，尤其是在欧美国家已迅速发展成为一个独立学科。国内在过去二三十年间，也启动了神经泌尿外科的研究及临床应用，但起步较晚，至今尚未成为一个独立的学科。神经泌尿外科之所以发展较慢且遇到困难，是因为这是一门涉及多个学科的功能性学科，融汇了多个学科的知识，且所涉猎的知识更加广泛和复杂。神经泌尿外科主要是通过非手术或微创手术（如电刺激、神经调节等），又或是通过下尿路重建或改建来恢复下尿路功能，从而保护上尿路功能并提高患者的生活质量。所以说这一学科比泌尿外科其他范畴更复杂、更具难度、更富挑战性。随着我国社会的发展，患者不单只停留在要求治愈疾病的层面上，而是更加要求追求生活质量。随着医学界对神经泌尿外科疾病认识的加深及其诊断水平的提高，神经泌尿外科的患者越来越多，而且要求亦日渐提高，因此，对泌尿外科医生的需求亦相应增加，而且要求的水平亦在提高。面临这一趋势，培养神经泌尿外科医生已成为国内泌尿外科界的当务之急。

近年，国内医学杂志零散地发表了一些有关神经泌尿外科的文章，亦相继出版了由我国泌尿外科医生借鉴国外学术成果，结合我国经验编写的书籍，但仍缺乏一本由世界各地神经泌尿外科专家共同编写的、内容全面系统、代表当今神经泌尿外科世界先进水平的中文版教科书。因此，我们选取了由 Jacques Corcos 和 Erik Schick 两位世界著名神经泌尿外科专家主编的《Textbook of the Neurogenic Bladder—Adults and Children》，将其译成中文版。此书由全球神经泌尿外科水平较高国家的 90 位神经泌尿外科专家共同撰写，他们代表了现今世界神经泌尿外科的最高水平。此书涵盖了成年人及小儿下尿路神经泌尿外科学的所有领域，水平高、内容全、资料齐，可作为临床泌尿外科医生，尤其是神经泌尿外科医生必备的教科书和工具书。

在神经泌尿外科方面，我们与本书作者的水平差距较大，但我们务求将最准确、最完美的译本奉献给读者，为我国神经泌尿外科学的建立和发展略尽绵力。

不尽之处，恳请读者不吝赐教。

何舜发

2011 年春于中国澳门

# 序

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《神经源性膀胱》这本综合性教材的出版有助于对此病的诊断和治疗。此书的出现非常及时。在过去的十年中,人们对下尿路功能的认识有着巨大的进步。这些年新技术层出不穷,不仅在分子生物学方面,而且在神经源性膀胱的治疗上也有了一定的突破,虽然尚不能达到治愈,但每一次进步都得到了高度的评价。

此书是由 Jacques Corcos 和 Erik Schick 等众多著名撰稿人所编著,是继 Langworthy 和 Kolb (1940),Bors 和 Comarr(1971)及我和 Bill Bradley(1982)出版刊物的续篇。回想过去,世界已经发生了翻天覆地的变化。40 年前,我撰写第一部专业书籍时,在泌尿外科领域还没有治疗该病有效的药物、可控性尿道造口术、电刺激疗法及人工括约肌,更别提膀胱替代了。而如今,该领域快速发展,取得了可喜的成就。

我相信,对于诊治神经源性膀胱患者和对下尿路生理感兴趣的人来说,此书可成为诊断和治疗的标准。国际尿控协会(the International Continence Society, ICS)和尿流动力学协会(the Urodynamic Society)作出的巨大贡献使神经泌尿外科学(neurourology)和尿流动力学(urodynamics)成为泌尿外科学的重要学科。这本著作正获益于此,且囊括了 ICS 的建议,令人非常满意。我诚挚祝贺《神经源性膀胱》的出版,感谢编辑和全体撰稿人为此作出的贡献。

国际尿控协会标准委员会主席 Tage Hald 教授

# 前 言

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作为泌尿外科的教授,我发现大部分学生和住院医师都对泌尿系肿瘤有着浓厚的兴趣。切除前列腺、膀胱、肾等对他们来说是很崇高的工作,他们喜欢“杀死疾病”。而当我们探讨有关功能、生理学、神经药理学和神经调节等方面问题时,他们就明显失去了兴趣。对他们而言,这些工作缺乏魅力和挑战,没有拯救生命的成就感,也可能是由于收入少吧。但我们想说,至少从流行病学的角度上看,患有排尿功能障碍包括神经源性膀胱的患者数量远远超过泌尿系肿瘤患者的数据。从专业上说,神经泌尿外科学和神经源性膀胱护理与疾病功能相关,是泌尿外科的特色学科。我们做几个小时的手术,但没有标本,因为我们没有切除任何的组织器官,而是做了重建。真正的难点在于功能的恢复。

为了让读者充分理解,在编书时,我们尝试将几位该领域世界著名的专家聚集在一起,给每一位专家分配一项艰巨的任务,要求他们总结、综合,并使大量的专业知识简单化,为学生、医师及健康护理专家提供一部有关神经源性膀胱的最新、精确、规范化且权威的参考资料。我们还建议每一位编者根据现有的理解水平去详述有关该病的全部表现。我们坚信,只要读者理解了现象的本质就能更好地记忆该病的病理生理学机制。

我们将书划分为九部分。

我们在第一部分概述了下尿路正常的胚胎形成、解剖结构和生理学。在第二部分,我们大篇幅讲述了神经源性膀胱不同方面的流行病学、病理学和病理生理学。这部分主要阐明不同临床疾病的发生机制。接下来的章节详述了导致神经源性膀胱的不同疾病。

在第三部分,我们归纳的是导致神经源性膀胱的神经病变,简洁地描述了神经病变的病理生理和所致膀胱-尿道功能改变的机制。

我们对全部患有膀胱-尿道功能障碍的患者应用相同的诊断设备进行研究,而不考虑神经病变的致病经过。这构成了文章的第四部分,包括评价患者疗效的生存质量调查,同时也概述了影像学、电生理学及尿流动力学研究在成人,甚至婴儿、儿童中的广泛应用,最终实践指导神经源性膀胱的诊断和随访。这部著作将成为医学生和住院医师名副其实的指导手册。

过去已有报道,根据症状、神经损伤的部位及尿流动力学检查而做出的神经源性膀胱功能障碍的不同分类。最近,专家提出了一份新的并且高度新颖的分类系统,这个系统同时考虑了结构与功能两个方面。国际尿控协会标准化委员会前任主席 Anders Mattiasson 教授介绍了该分类系统并把它写入本书,构成了本书的第五部分。

一些新的非手术疗法,包括新药及新的给药途径,在过去十年中逐渐成为标准。数年前提到的电刺激疗法已经在本书四个章节中有所叙述,该疗法很有可能成为该领域中一种很有前景的方法。在描述了仍被广泛采用而且很有必要的手术治疗后,我们有三章很有吸引力的内容,向读者展示了未来 50 年神经源性膀胱的诊治方法。以上构成本书的第六部分。

第七部分是综合治疗,概述了基于患者年龄及其主要功能障碍而定的各种不同的疗法,但需要记住

的是膀胱-尿道功能平衡的原则。

第八、九部分论述了神经源性膀胱的潜在并发症和临床病例的预后、进展及随访结果。

附录部分,我们提供了国际尿控协会标准化协会三份无删节的报告及欧洲泌尿外科协会关于神经源性下尿路障碍的最新指南。第一份报告是关于下尿路功能方面的最近更新的标准化术语;第二份报告是关于神经源性下尿路功能障碍,包括诊断过程的建议;第三份报告是关于肠代膀胱的功能指标方面的术语及评估。这三份报告中的观点已被国际科学协会一致认可,所以我们认为很有必要作为附录提供给读者。

普通医学,或者更确切地说是,泌尿外科在过去的几十年里经历了巨大变革,也从根本上改变了我们对神经源性膀胱功能障碍的认识。

我们认为从实际出发,更深入地总结我们学科目前所处的位置势在必行。希望现已成功。

在此,我们深深地感谢每一位接受邀请参与编写此书的专家,感谢他们在百忙之中为广大读者分享宝贵的经验。还要感谢 Carole Goldberg 很有成效的秘书工作及 Ovid DaSilva 和他的编辑组对本书的语法和拼写的校正工作。最后把我们最真挚的感激送给我们的妻子 Sylvie 及 Micheline,感谢她们在该书出版过程中付出的无私照顾。

Jacques Corcos

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2004 年 2 月于蒙特利尔

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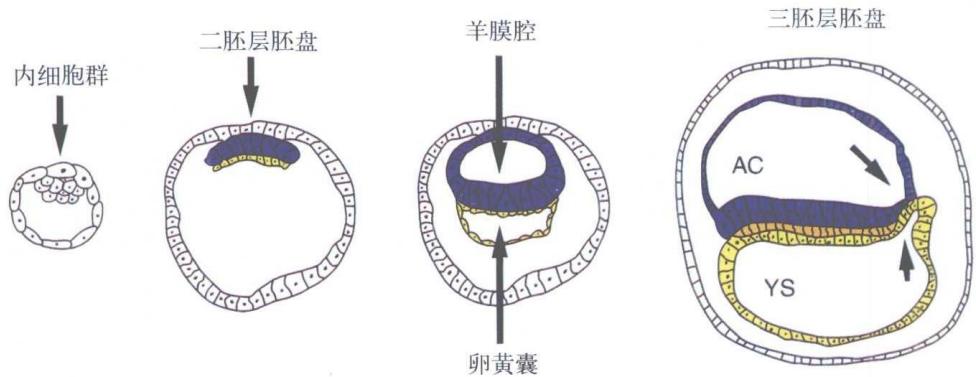
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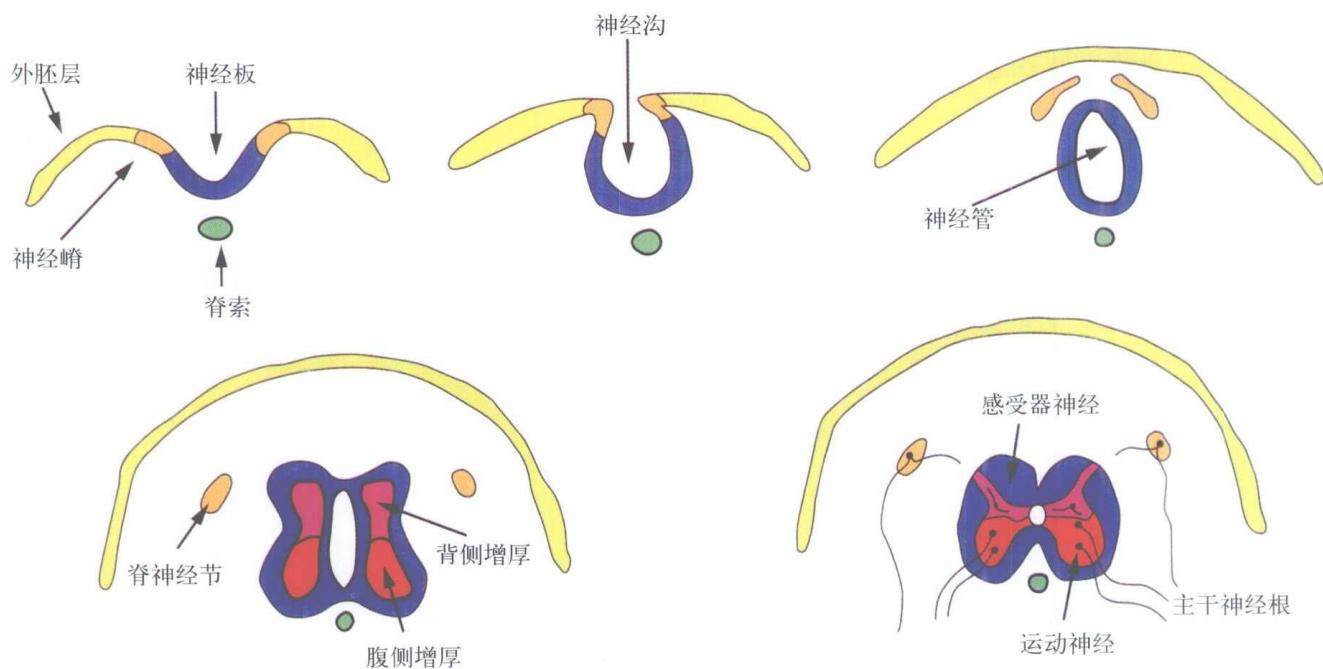
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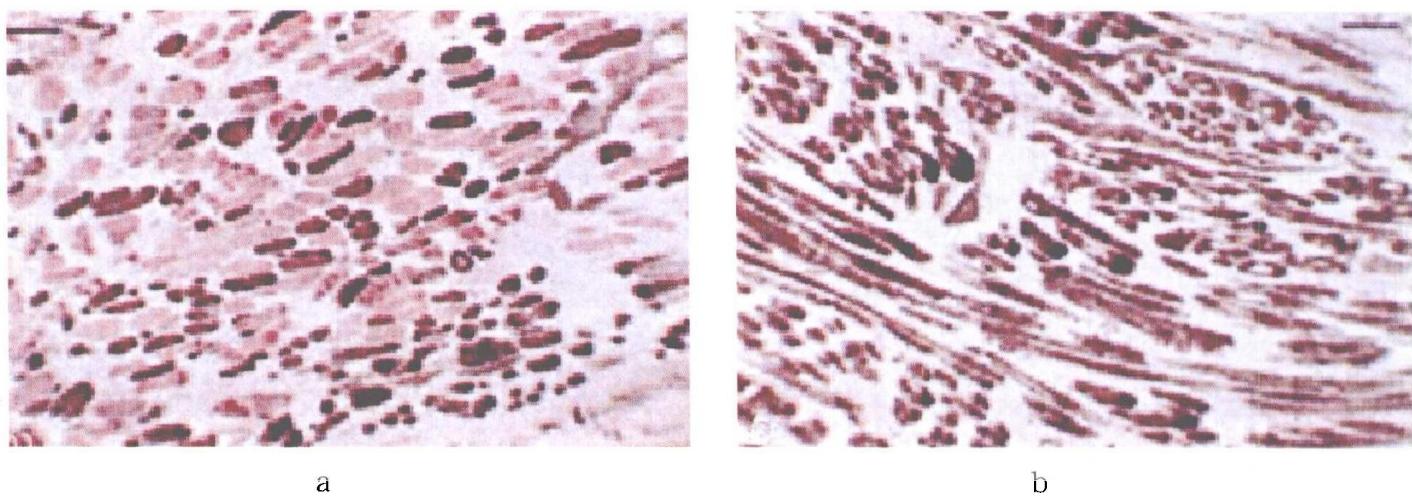
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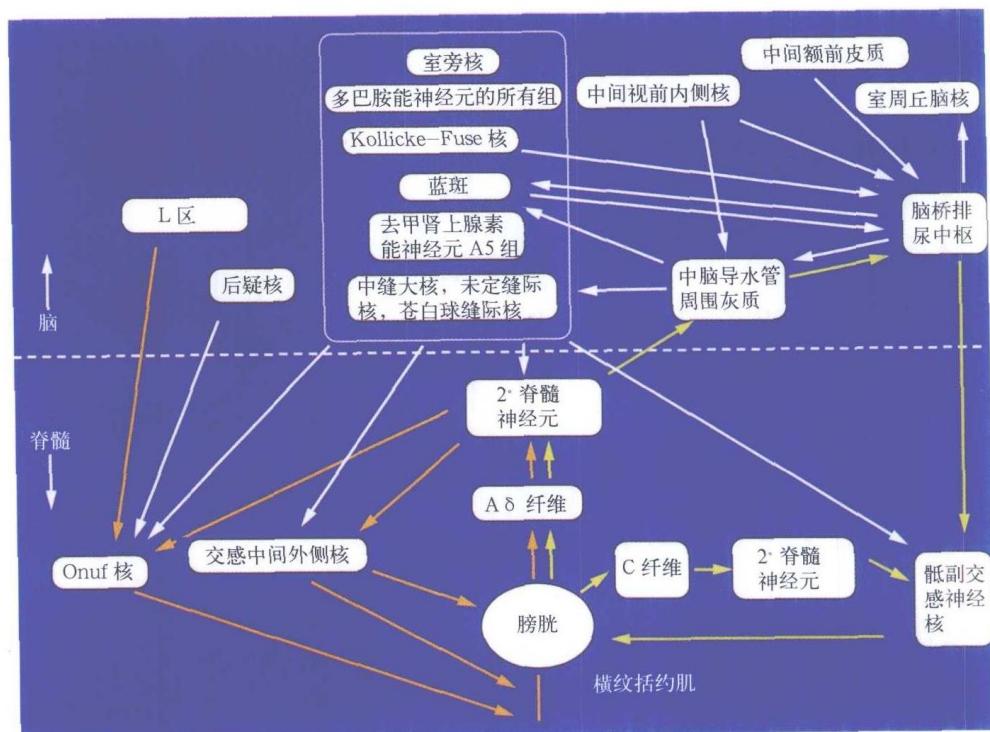
彩图 1



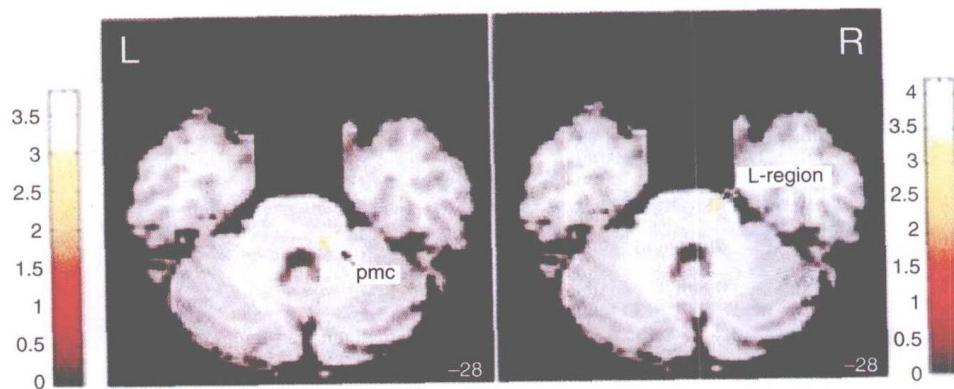
彩图 2



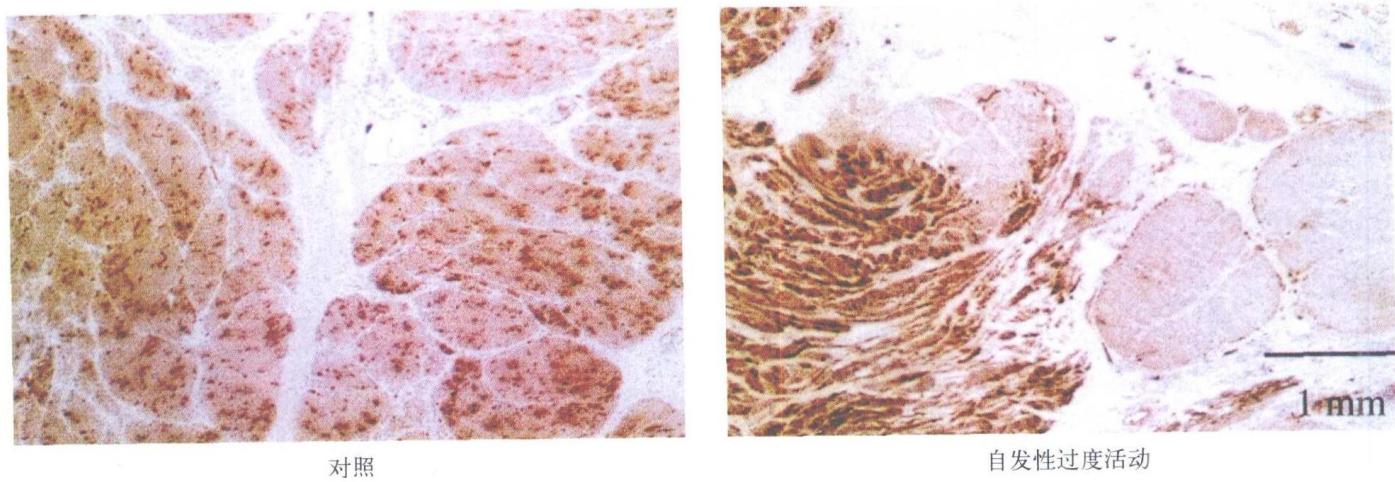
彩图 3



彩图 4



彩图 5



彩图 6