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# 创伤骨科学

上卷

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## Skeletal Trauma

Basic Science, Management,  
and Reconstruction

T H I R D E D I T I O N



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# 创伤骨科科学

## SKELETAL TRAUMA

Basic Science, Management, and Reconstruction

上 卷

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# 医学插图作者

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编者非常欣赏医学插图画家们的工作,他们为第一版创造了美轮美奂的图片,其中的大多数在本版中仍然得以保留。他们是:

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(鞠晓东 译 姜思权 校)

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(鞠晓东 译 姜思权 校)

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# 《创伤骨科学》中译本序

创伤在人口死因构成比中为重要原因之一，也是常见的致残原因。在人体运动系统的病谱中，骨与软组织损伤病例数量占绝大部分。在临床工作中，骨科医生几乎每天都要处理创伤病人。

在过去的几十年中，创伤骨科发生了巨大的变化和惊人的进展。运用创伤骨科的现代理论为指导，采用现代诊疗方法与技术，绝大多数创伤病例，应能够获得成功的治疗和满意的效果。同时，病人与社会对治疗的期望和要求也在迅速地膨胀与提高。这是发展中的中国骨科和骨科医生所面临的问题。中国骨科的水平已有显著提高，在某些方面也取得了举世瞩目的成绩，但是总体上看，发展与进步存在不平衡；城乡之间、不同地域之间存在显著差异。这也是我们所面临的问题。

我们需要加倍努力地工作，学习。在实践中学习，创新，提高。

“知识就是力量。”书籍是传播知识的载体。我坚信，《创伤骨科学》第3版中译本将为中国骨科的进步注入新的活力。

《Skeletal Trauma》第3版，以4位著名骨科教授为主编，集北美和欧洲117位创伤骨科专家为作者，在第1、2版基础上，根据当前的进展与骨科医疗实践的需求，进行了修改，并增添了许多新内容，是一本权威性教科书、参考书。正如Harald Tscherny教授在序言中所说：“每一位从事骨骼创伤的外科医生都需要一本能解释和处理日常医疗实践中遇到的困难问题、全面而最新的教科书。可以认为，在当今世界范围内，《Skeletal Trauma》应是本领域中最重要教科书。”国内一些著名骨科医生，不惜花费巨大精力组织力量翻译此书，其用心和精神值得敬佩和赞扬。我确信本书中译本必将为提高中国创伤骨科的水平发挥重要作用。

党耕町

教授，原中华骨科学会主任委员

2006年9月4日

## 译者的话

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W.B. Saunders出版公司是世界上著名的美国最大的出版公司之一。它曾经出版了许多在世界科学技术领域产生重大影响的科学巨著。1992年出版的《Skeletal Trauma: Fractures, Dislocations, Ligamentous Injuries》(本书的第1版),曾荣获美国出版商协会的医学科学大奖。本书作者都是美国和加拿大500家地区创伤中心的一线工作者。本书以卓越的内容、秀美的插图清晰地展现了当前世界关于人体运动系统损伤最新技术的前沿实用成果与经验。因此,本书得到了全世界骨科和创伤外科医生的接受和推崇,出版后不久迅速成为欧、美、亚等各洲创伤骨科医生临床工作的必读参考书。我国不少创伤骨科医生将其视为创伤骨科学临床工作蓝本(如某医科大学一个主要附属医院的骨科医师,人手一册,工作中随时查阅),可见该书编著的实用和成功。本书尤其着重讨论了创伤骨科学临床上共同关注问题的判断以及行之有效的外科技术。它不仅可以丰富及完善临床年高资深的创伤骨科医师理论技术水平,而且也是一本能帮助正在接受培训和实习的住院医师与实习医师提高治疗水平的最具权威性的参考书,可指导他们对肌肉骨骼损伤进行正确处理。本书第3版分别就创伤骨科医学的发展动向性内容做了相应的修订和补充。

鉴于以上所述,北京大学第三医院骨科、天津医院骨科、天津医科大学总医院骨科、上海第二医科大学第九医院骨科等著名骨科专家协作将该书第3版译成中文供国内创伤骨科学同道参考,而今又承蒙天津科技翻译出版公司给予热情支持,精美编辑出版,不胜感谢。

王学谦 姜思权 侯筱魁 李世民

2006年4月16日

一直以来,外伤对所有人,包括青年和老年人,都是一种持续存在的威胁。在最早期给予伤者最适当的处理一直是我们的目标,但是只有在当今时代,凭借非常先进的现代创伤外科观念,这一目标才能真正得以实现。目前,一批致力于开发和应用先进技术的专家提出并实施了一系列卓有成效的治疗程序,从而使创伤外科能成功地处理绝大多数外伤,使患者康复,重返他们的家庭、工作和职位。这样的治疗不仅提供了一种人道主义的服务,而且产生了巨大的经济效益。

奇怪的是,由创伤外科提供的这些服务长时间一直未被大众所公认。肌肉骨骼系统损伤和疾病是引起各种慢性疼痛和身体不适的最常见原因,全世界受其影响的达数亿人。但通常这些情况都不是致命的,因此未能引起大众的关注,人们更多关注的是心脏病、癌症和艾滋病。

运动系统外伤和疾病对全世界很大一部分人的健康和生活质量造成了巨大的损害,而且在当前60岁以上的患者中占到所有慢性疾病的一半以上。但是肌肉骨骼系统损伤不仅仅在老年人中非常突出,而且40%以上的年轻人第一次和医生打交道就是由于运动系统的外伤和疾病。此外,在不适于继续工作或提前退休的所有病例中,运动系统外伤和疾病也占了40%以上。

在年轻人中,由于运动系统的外伤和疾病而导致不能胜任工作、成为残疾或过早死亡,意味着社会资源的极大损耗。另外,在我们的社会中老年人的比例将越来越大。短短的8年以后,在欧洲和北美洲,老年人就将比20岁以下的年轻人还多。随着时间的流逝,在发达国家的这种形势会变得更加严重:到2020年时,大于65岁的老年人将占总人口的25%,10年后的2030年将会占到35%。到那时,年龄大于85岁的人将占到6%。因此大于85岁的人会成为增长最快的人群。这与创伤外科有很大的关系,例如,预期全世界股骨颈骨折的病人会从1990年的170万例升高到2030年的630万例。目前,交通事故(技术进步带给人类的特殊“礼物”)已泛滥成灾,特别是在发展中国家中,它们占用了这些国家中本来已很有限的医疗资源的相当大部分。

创伤外科在过去50年中经历了极大的变化。与此同时,创伤外科处理疾病能力的增长却跟不上病人和社会期望值的增长。人们再也不能容忍因意外事故而残留身体损伤。现在,病人要求完全恢复健康,经常为此而诉诸于所有可用的法律手段和其他办法。而且,和整个医学领域一样,创伤外科还将受到政治、经济、法律、科学以及信息和互联网结构全球化改变的影响。创伤外科医生为了应对现在和将来的情况,也必须主动处理好这些问题和挑战。

现在,社会发展和发生变化的速度越来越快,灵活性和适应性变得越来越重要。外科医生面临着逐渐增长的来自于微电子和计算机技术的压力。在微创外科中,微型机器人、经皮外科和微探针技术以及影像学辅助的微创操作的应用,使得传统外科手术显得有些过时。创伤外科医生还必须保证在进行医疗决策时不能输给技术人员和放射技师这些医务工作人员。基因工程和组织学工程的进步会在将来的外伤预防和治疗中起到重要作用。数字化革命对工作流程和疾病处理的影响是不可预测的。最终,外科手术将会由程序化的机器(如机器人医生)、主从系统或者自动或半自动系统来实施,这会将我们带入一个彻底的新领域。医生的外科技术训练也将进入一个新的领域。模拟和虚拟现实将会成为模式训练中非常自然的一部分。作为一个整体,全世界的创伤外科需要有一批视挑战为机遇和有见识有责任能应对变化的新一代外科医生。

每一位从事骨骼创伤的外科医生都需要一本能解释和处理日常医疗实践中遇到的困难问题、全面而最新