

W I L L I A M S

# 威廉姆斯血液学 HEMATOLOGY

第6版

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## 译者前言

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《威廉姆斯血液学》作为一部举世公认的权威性血液学专著，举世闻名。因其基础理论新颖、临床内容翔实、文字简练及编排合理，而深受读者欢迎。然而多年来，该书没有中译版，实是我国血液学界的一大遗憾。

自本书英文版第5版面世以来，在血液病的诸多领域，如造血机制、细胞因子的作用、基因及细胞生长调控、免疫系统功能、血栓与止血基础等方面，都取得了长足的进步和发展。这些新进展在第6版中都作了较为详尽的介绍，以期让读者能更多地掌握血液学领域中的新进展、新动向及新的发展趋势。实验室检查对血液学的诊断、治疗及疗效监测均具有重要意义。秉承本书已往的传统，在本版各章节中，对近5年发展起来的各种与血液病相关的生物化学、影像学及分子生物学技术，尤其是其在有关疾病发病、诊断、治疗中的意义和作用，都尽可能予以叙述，以保持和提高本书的先进性及实用性。但限于篇幅，有关这些技术本身的具体内容，原版本进行了适当删除。

本书第6版中文版的顺利出版，首先应感谢人民卫生出版社有关领导及工作人员。为了推动我国血液学的发展，提高血液病学术水平，普及血液病防治知识，他们不辞辛劳，顺利完成了大量前期工作；在本书翻译过程中，又与译者保持密切联系，及时解决各种问题，保证了编译工作的顺利完成。

本书的翻译工作主要是由华中科技大学的血液病工作者利用业余时间完成的。为了作好文稿翻译，学者们在百忙之中夜以继日地工作，即使在奋战“非典”的严峻时刻，也没有一刻的停顿，终于如期完成了翻译任务。

在本书即将出版之际，谨向为翻译本书作出直接或间接贡献的专家、学者和工作人员，特别是一些年高德昭的老教授们，致以最衷心的感谢！

由于原版书篇幅浩瀚，时间紧迫，加之我们的水平有限，因此本版中文版的疏漏和错误一定在所难免，敬希有关专家及广大读者不吝赐教。

宋善俊

2004年5月于武汉

## 序

在第五版《Williams Hematology》出版至今的五年内，血液学诸多领域进展迅猛，包括造血机制、细胞因子的作用、基因及细胞生长调控、免疫系统功能及对血栓与止血的认识等。

在本书编辑之际，我们非常荣幸地邀请 Uri Seligsohn 博士加入本编辑组，他广博的血液学知识及作为在血栓与止血领域的知名专家是本书的宝贵财富。所有的编著者都是相关领域的著名专家。如前几版一样，编辑们仔细审阅每一章节并且在必要时，大量修改甚至重写相关章节以保持统一性及使读者有所收益。

企图尽可能包括在过去 5 年所积累的新知识并同时编辑出具可读性的单本参考书对作者和编辑们来说是一巨大挑战，为达到这一目的，我们决定删除本书与实验技术有关的章节。自第一版以来，本书的这一部分是特色之一并且似乎能满足某些重要的需求。与多数医学专科不同，血液学基于实验室检查并且了解其实验技术是必需的。当第一版出版时，使临床受训者参考本书进入实验室成为可能，有时可能在有经验的特殊的血液学技术人员的帮助下，进行很多必要的研究以确立诊断。实验手段的自动化在很大程度上减少了受训者进行相关方法实践的必要性，并且这一趋势无疑能提高结果的可靠性，使得受训者透彻了解相关的特殊方法显得并不重要，但我们仍认为受训者应该了解这些研究是如何进行的并合理解释之。因此，本书包括了有关检测指标的讨论及在相关章节的解释。另外，我们鼓励受训者参考在本书中不可能包括的由仪器及厂家提供的详细手册及其他的参考书。

当审阅第五版各章的分布时，我们意识到在以前的版本中有关红细胞章节的版面和整个止血章节的版面是一样的。在第八篇“淋巴细胞和浆细胞”中的免疫系统仅有上述的版面的一半。当然，红细胞对血液学家及普通医生来说非常重要，因为贫血毕竟是疾病的常见表现之一。然而，科学发展的本质要求我们重新安排版面，这部分通过削减血红蛋白、葡萄糖-6-磷酸脱氢酶及不同的血浆蛋白的遗传学有关部分而达到这一目的。同时本书中还提供了有关参考的完整目录，并且这些目录，在不同的网址还有提供并在不断更新。我们已建立了 *Williamshematology.com* 网址以提供相关链接或目录本身。一些有益于使用该书读者的特色内容业已增补，每章节前增补了简要小结以减轻读者查阅某些定义的任务，编者也将编著者所用缩略词置于每章的章头。

本书的诞生需要很多编著者的共同合作。正因为他们编写的每一章节才使我们得以完成这一浩大的工程。本版也修改和增加了彩页，多数血液及骨髓显微图片由富有经验的实验室血液学技术专家提供。一些同行在审阅本书的过程中也给予了我们很大的帮助；在查证参考文献时也得到多数相关工作人员的大力协助。在这里一并感谢他们。

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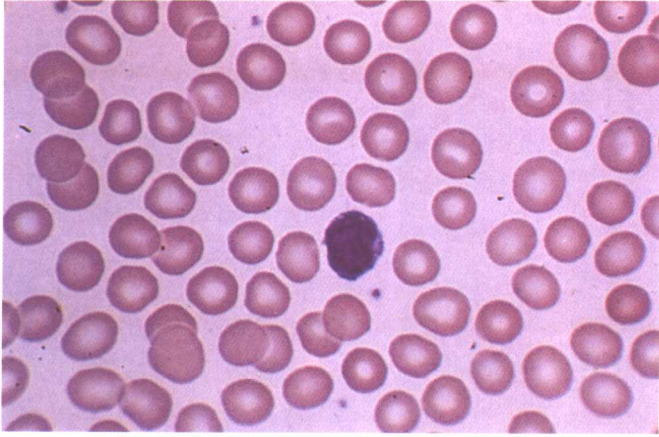
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System  
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Jefferson University  
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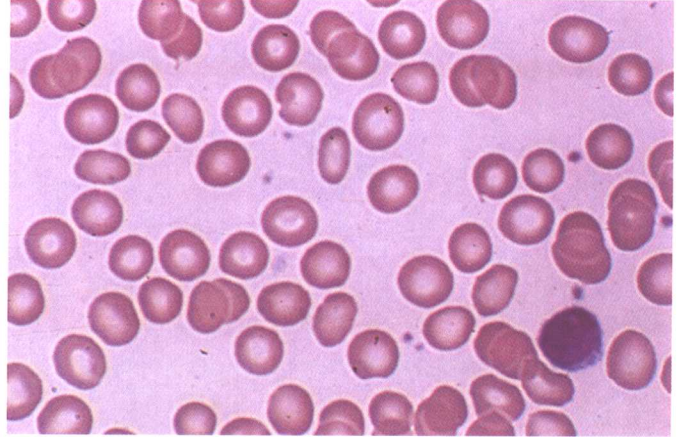
- JEFFREY MCCULLOUGH, M.D. [139]  
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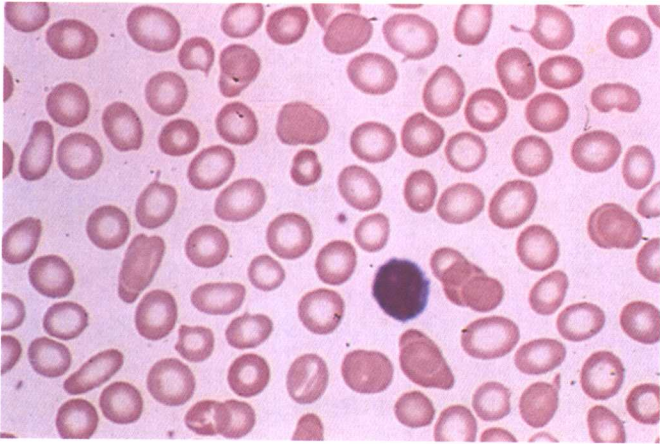
# 彩图 I 红细胞形态学



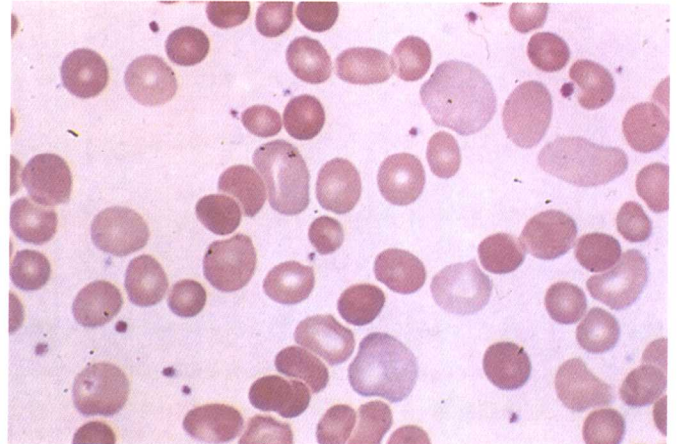
彩图 I-1 正常红细胞



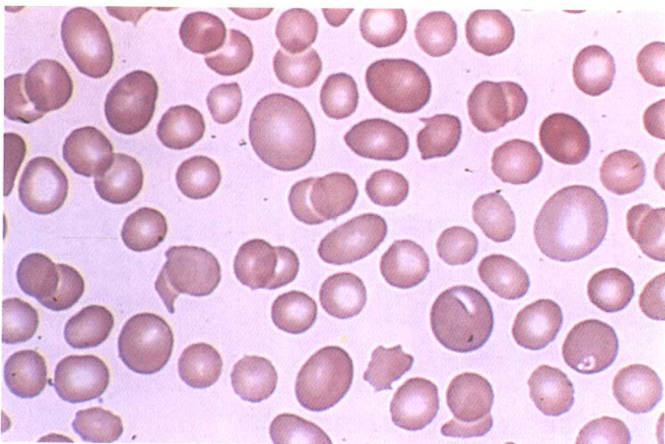
彩图 I-2 早期缺血性贫血的轻度低色素及小红细胞症



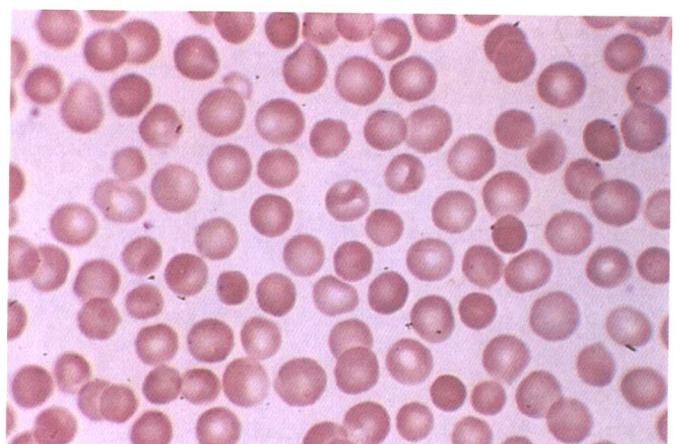
彩图 I-3 缺铁性贫血的重度低色素及小红细胞症



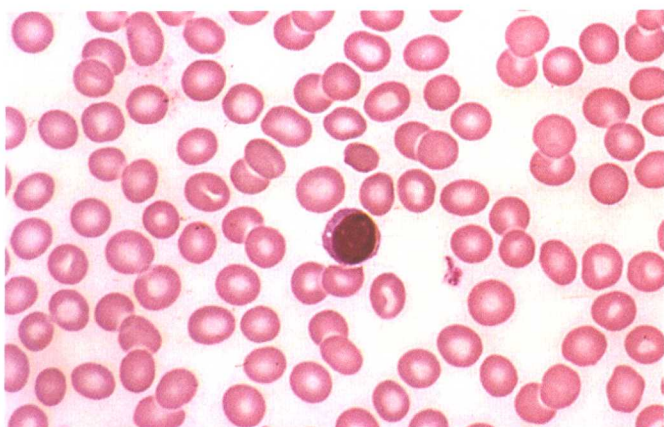
彩图 I-4 嗜多彩细胞



彩图 I-5 巨红细胞症



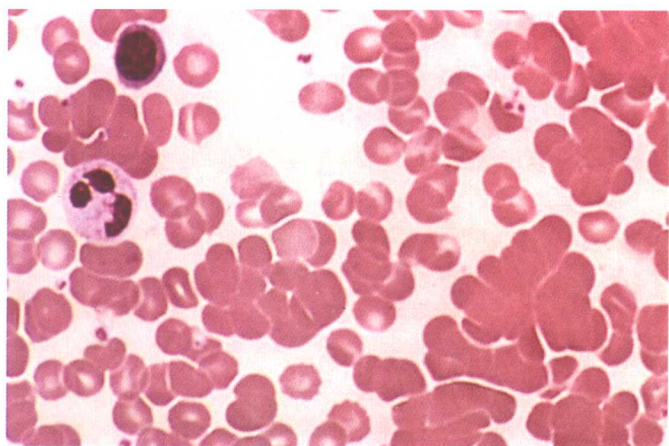
彩图 I-6 球形红细胞增多症



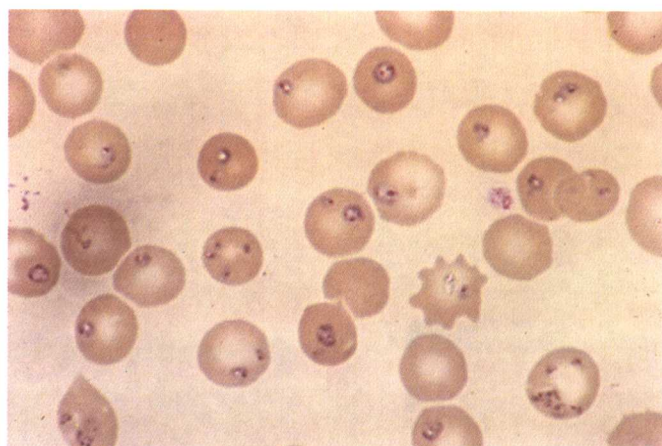
彩图 I-7 正常红细胞分布



彩图 I-8 缗钱状形成



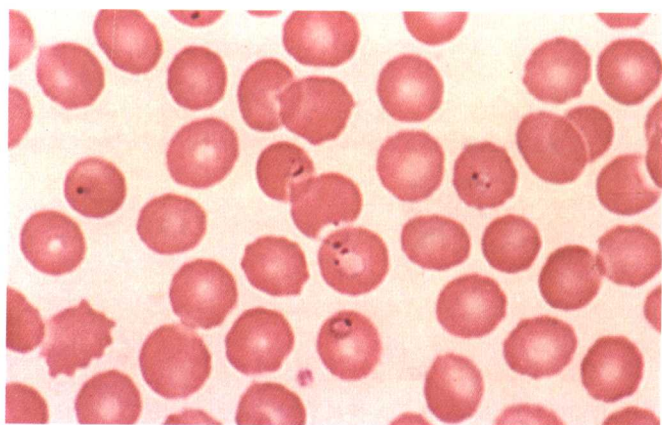
彩图 I-9 红细胞凝集



彩图 I-10 含田鼠巴贝虫的红细胞



彩图 I-11 含间日疟原虫滋养体的红细胞



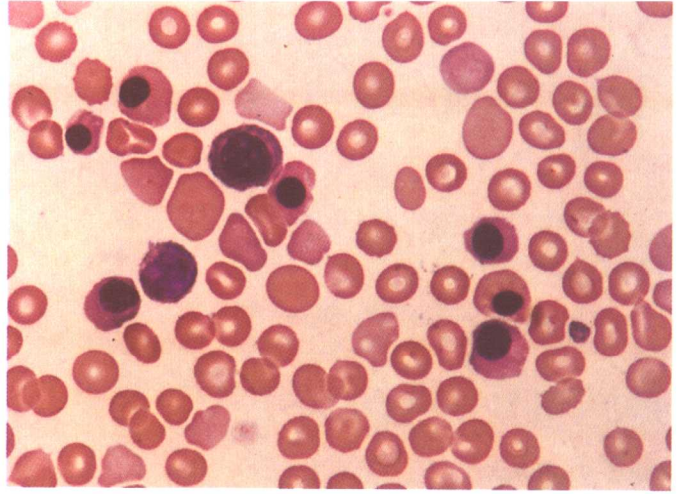
彩图 I-12 含环形恶性疟原虫的红细胞

(I-1~I-12 为血片)

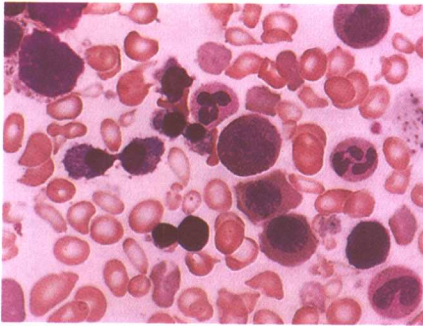
## 彩图 II 红细胞形态学



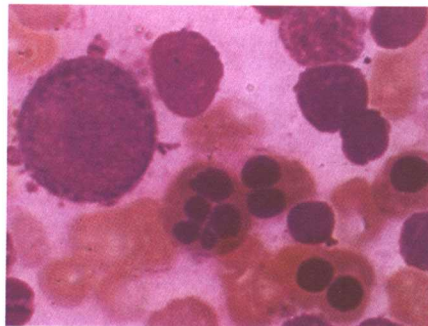
彩图 II-1 红细胞体外活体亚甲蓝染色，网织红细胞保留有细胞内核糖体 RNA 的沉积染色



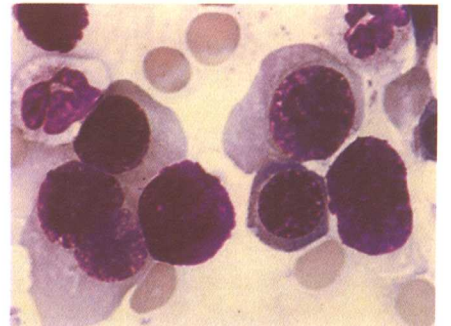
彩图 II-2 新生儿溶血性疾病（胎儿有核红细胞增多症）。嗜多彩细胞，球形细胞及循环的有核红细胞



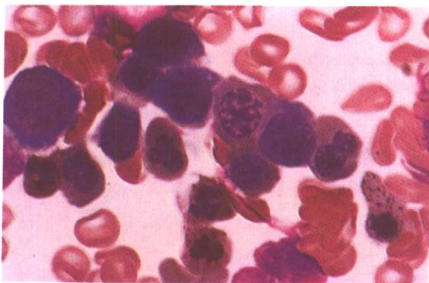
彩图 II-3 骨髓片示遗传性红系造血异常性贫血。红细胞形态异常及有核红细胞核异常（成桥）



彩图 II-4 骨髓片示有核红细胞的多核性



彩图 II-5 骨髓片示遗传性红系造血异常性贫血。可发现巨大有核红细胞及二核有核红细胞



彩图 II-6 慢性砷中毒。骨髓片示显著的红系造血异常

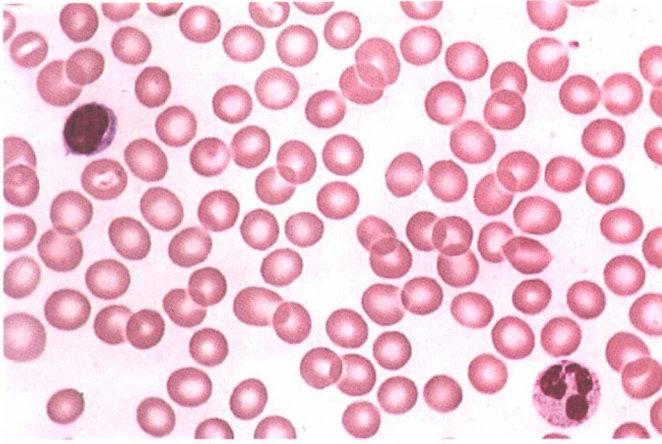


彩图 II-7 梭状芽胞杆菌败血症。巨噬细胞及中性粒细胞的吞噬红细胞现象。小球形红细胞及红细胞显著减少

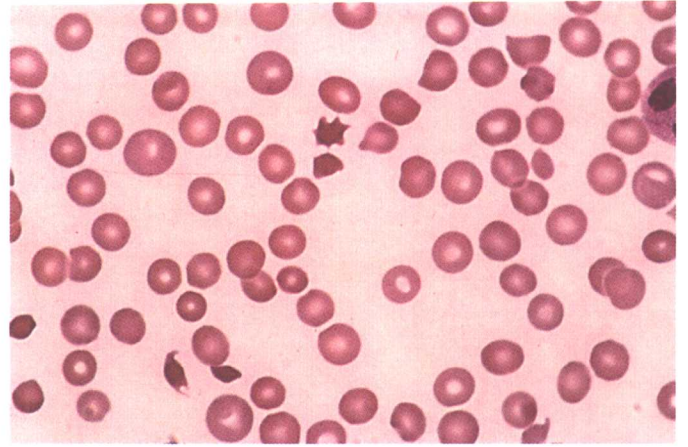


彩图 II-8 梭状芽胞杆菌败血症。中性粒细胞内的梭状芽胞杆菌

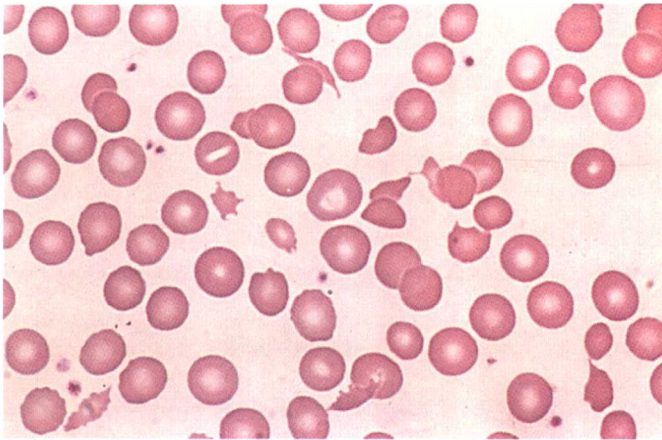
### 彩图 III 红细胞形态学



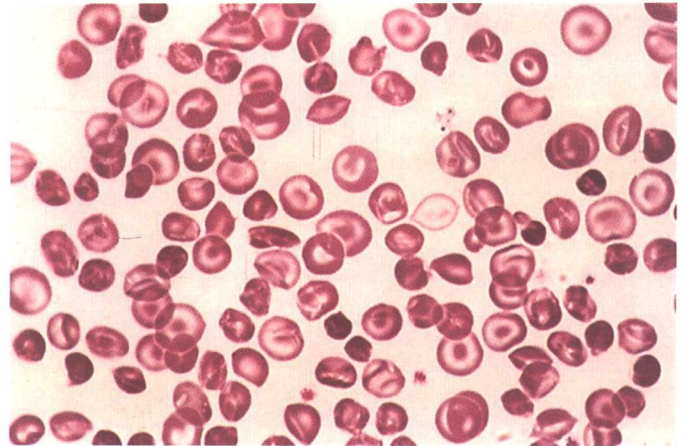
彩图 III-1 正常血片



彩图 III-2 破碎红细胞：弥散性血管内凝血



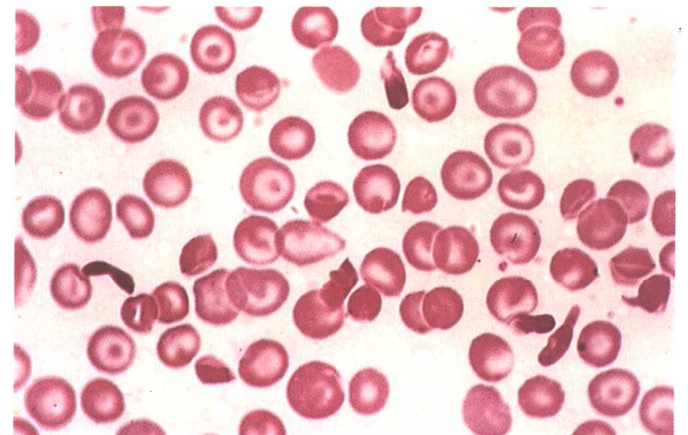
彩图 III-3 破碎红细胞：心脏瓣膜溶血



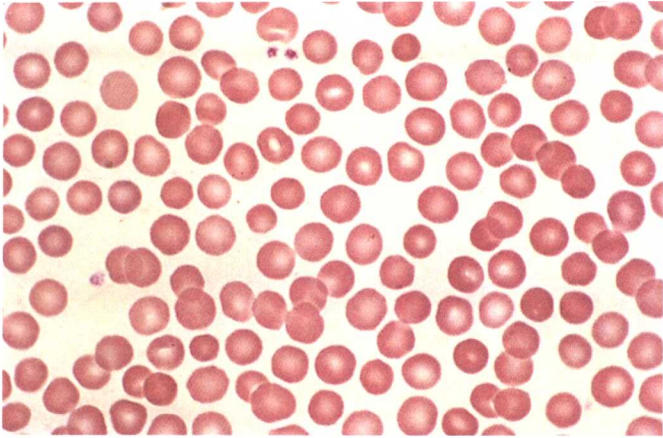
彩图 III-4 靶形细胞：血红蛋白 C 病



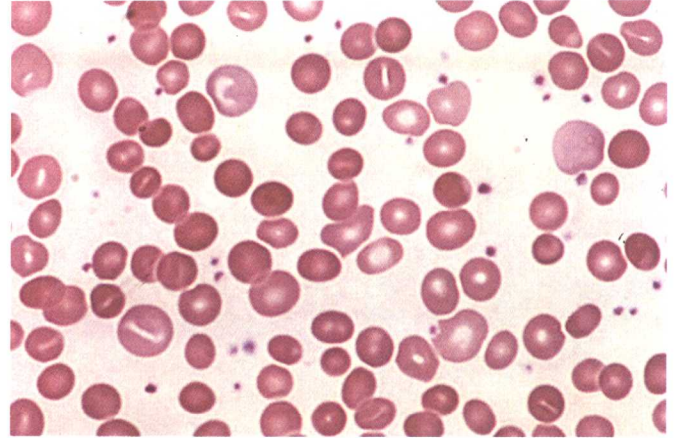
彩图 III-5 镰刀细胞：纯合子镰刀细胞疾病



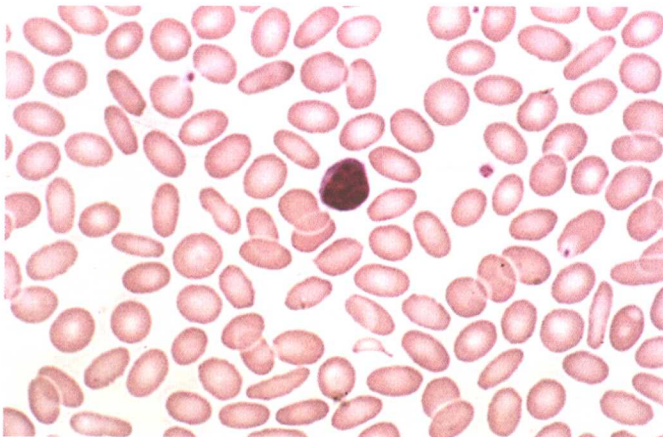
彩图 III-6 靶形细胞和镰刀细胞：血红蛋白镰刀细胞病



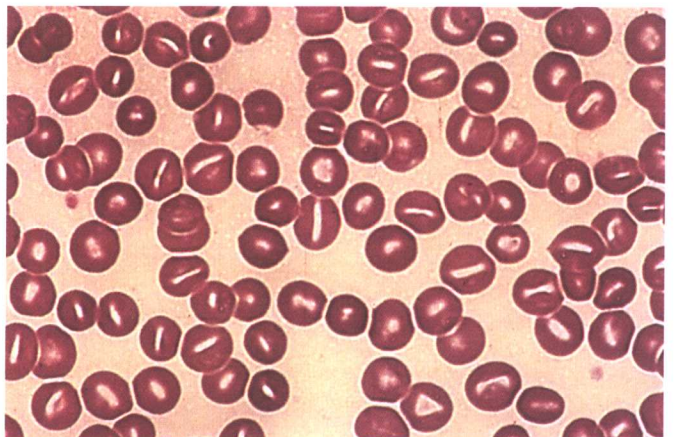
彩图 III-7 球形细胞：遗传性球形细胞增多症



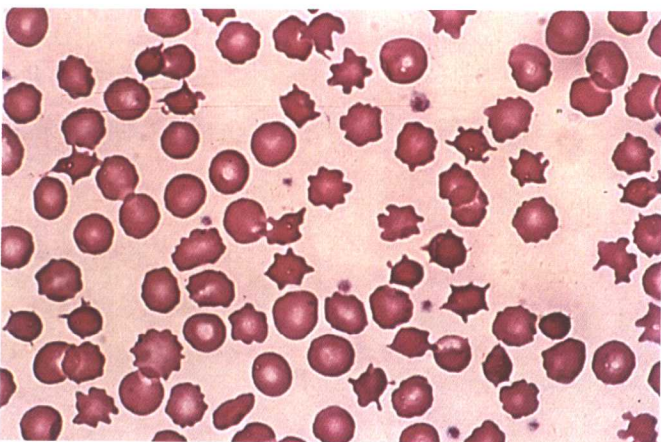
彩图 III-8 球形细胞：自身免疫性溶血性贫血



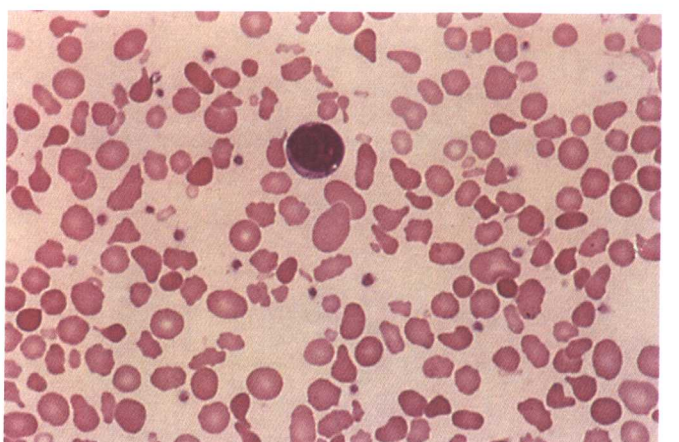
彩图 III-9 椭圆形红细胞性贫血



彩图 III-10 口形红细胞增多症



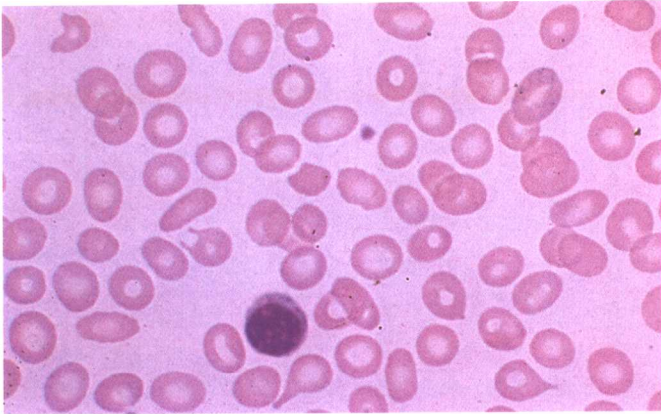
彩图 III-11 棘状红细胞增多症



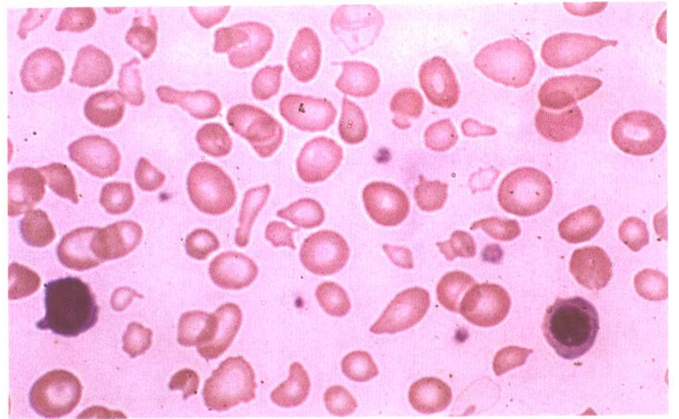
彩图 III-12 异形红细胞病：遗传性热异形红细胞病

(III-1~III-12 为血片)

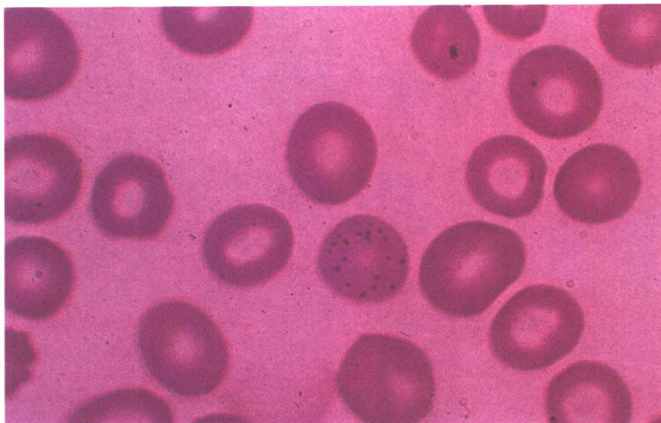
## 彩图IV 红细胞形态学



彩图IV-1 轻型地中海贫血。轻度低色素，异常红细胞及点彩红细胞



彩图IV-2 重型地中海贫血。重度异常红细胞，轻度低色素，有核红细胞



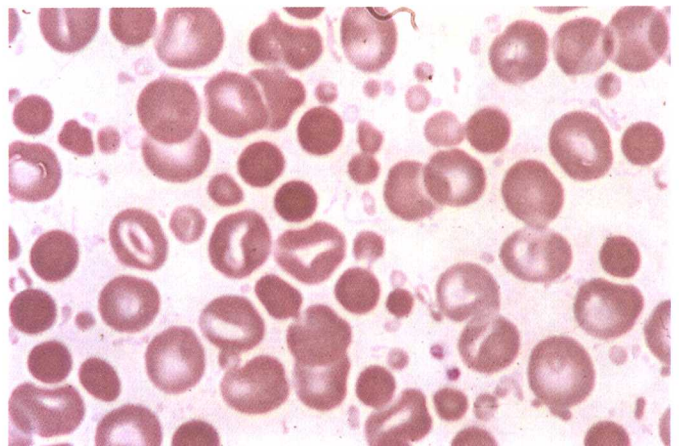
彩图IV-3 铅中毒。轻度低色素。粗点彩红细胞



彩图IV-4 亨氏小体。血液与结晶紫低张溶液混和。细胞变性的血红蛋白沉淀



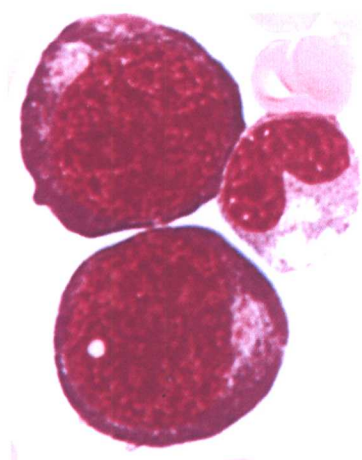
彩图IV-5 严重自身免疫性溶血性贫血。血片上红细胞稀少，常有小圆形红细胞，血单核细胞吞噬红细胞现象



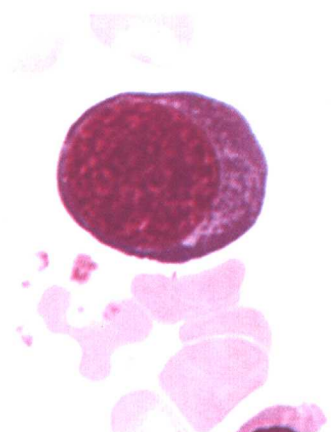
彩图IV-6 广泛三度烧伤。球形红细胞增多，包括极小球形“细胞”



## 彩图 V 正常红系造血



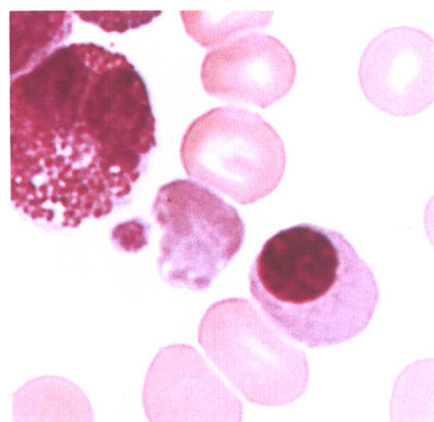
彩图 V-1 原始红细胞



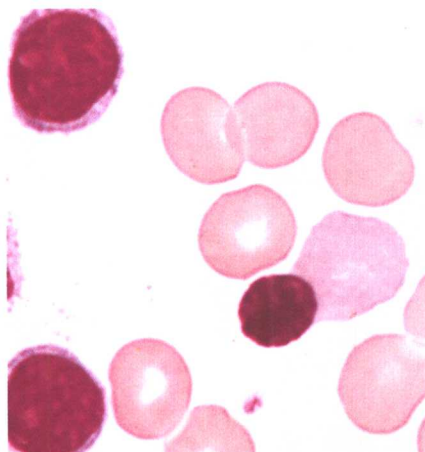
彩图 V-2 嗜碱性有核红细胞



彩图 V-3 嗜多彩有核红细胞



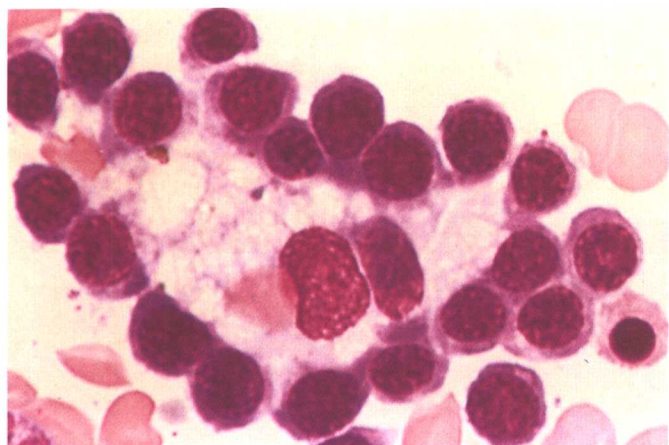
彩图 V-4 正染性有核红细胞



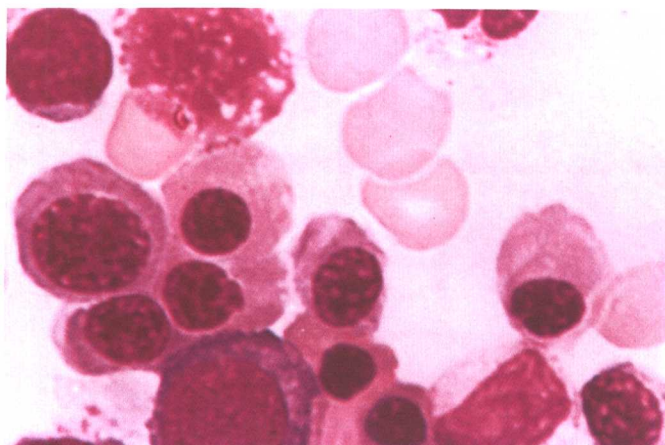
彩图 V-5 正染性有核红细胞胞核



彩图 V-7 原始红细胞，嗜碱性有核红细胞，嗜多彩有核红细胞，正染性有核红细胞（也有小浆细胞）



彩图 V-6 造血岛：中央巨噬细胞环以有核红细胞



彩图 V-8 嗜碱性、嗜多彩及正染性有核红细胞

(V-1~V-8 为骨髓细胞)