

内分泌外科学

Surgical Endocrinology

原著 Gerard M. Doherty
Britt Skogseid

主译 刘中民 赵中辛

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Gerard M. Doherty, et al.

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内分泌外科学

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中文版序-1

20 世纪末到 21 世纪，临床外科学发生了翻天覆地的变化。新观念、新理论、新技术、新实践不断涌现并应用于临床，其结果令全世界为之震惊。虽然最为瞩目的是移植外科和微创外科，但内分泌外科也不例外。现今的《克氏外科学》已将内分泌外科单独列为一个章节。胰腺的内分泌（endocrine pancreas）在其中讲述，而胰腺外分泌（exocrine pancreas）在胰腺外科中讲述。由此，内分泌外科的独立性和重要性可见一斑。

随着分子生物学、遗传学、解剖学、生理生化学、病理学、影像学的发展，人们对内分泌外科疾病的认识更加精确和完善，治疗效果也更加有效和完美。这其中有许多新知识、新理论、新方法、新技术需要我们去掌握并应用于外科临床实践。而国内系统描述内分泌外科疾病的专著较少。目前仅见南京医科大学武正炎教授及北京协和医科大学朱预教授各自编著的《内分泌外科学》。有鉴于此，上海同济大学医学院附属东方医院外科的刘中民教授和赵中辛教授应人民卫生出版社之邀，组织上海东方医院的一批专家学者，翻译了美国密歇根大学医学院内分泌外科学主任 Gerard M. Doherty 教授主编的《内分泌外科学》。我有幸先睹为快。读后之余，感到这本书大量引用世界范围内的临床资料，内容详实，论述精辟，立论严谨。对内分泌外科疾病从遗传学到流行病学，从解剖、生理到病理生理，从病因、诊断、鉴别诊断到治疗，均有详尽阐述，是一本很好的内分泌外科学参考书。故向我国外科界同道、中青年外科医生、研究生和住院医师推荐。相信大家读了之后，对各自的临床实践均有裨益。

同济大学是我的母校。自 20 世纪 50 年代初同济大学医学院搬到武汉，一晃 50 年过去了。改革开放之后同济大学恢复了医学院，并集聚一批国内外中青年专家。看到母校医学院的恢复和发展，我非常高兴。在同济大学 100 年校庆前夕，刘中民教授、赵中辛教授请我审阅译文，我欣然应答并为该书作序以兹纪念。

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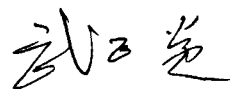
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中文版序-2

目前发达国家以及我国香港地区都有内分泌外科。美国和国际内分泌外科学会在上世纪 70 年代先后成立。内分泌外科疾病的特点是腺体的功能改变在先，形态学改变在后，诊断有一定困难。随着激素测定技术和影像学定位技术的改进，使该领域得到快速发展。特点是 APUD（胺前体摄取及脱羧作用）概念的引入，发现有 APUD 代表的一大组细胞，广泛分布于垂体、胰岛及前列腺，分泌一些特定的多肽及胺类物质。这一点可解释不同部位的良、恶性肿瘤会产生相似的临床症状，以及多发性内分泌肿瘤的临床表现。将这些疾病放在一起研究，并与内分泌科、病理科、影像学科、检验科等密切结合，提高了这些疾病的诊断与治疗水平，内分泌外科也就应运而生。目前我国尚无确实独立的内分泌外科，而是将这些疾病分布在各个学科处理。

我和孙则禹教授在 1998 年 2 月编写了《内分泌外科学》，希望能引起同道们对该领域疾病的关注。2000 年朱预教授编写了《临床内分泌外科学》，使同道加深了对该类疾病的认识。欣闻刘中民教授、赵中辛教授等翻译了 Gerard M. Doherty 和 Britt Skogseid 编写的《内分泌外科学》，该书内容精炼、全面，是一本颇受欢迎的参考书。其译文亦忠实、流畅，深信能使广大读者得益，将对我国内分泌外科事业起推动作用。



南京医科大学第一附属医院普外科教授
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原版序

在尚未完全认识内分泌系统之前，内分泌学不可能成为一个独立的临床专业。随着大多数独特的无管腺体及其激素产物的发现和证实，内分泌学逐渐形成，并显得越来越重要。与机体的实体肿瘤不同，内分泌肿瘤的主要危害是其自身分泌过度的激素对全身产生不良影响，而不是因肿瘤实体直接侵袭导致的局部症状。内分泌学的诞生使内分泌外科学成为外科学的一个重要分支。一方面因内分泌肿瘤较为罕见，另一方面早先测定体内激素含量和影像学定位方法不敏感，故而导致诊断困难；此后，随着实验室诊断方法和放射影像技术的不断更新，愈来愈多的因肿瘤分泌过量激素产生症状的病人得以诊断。因此，需要一批具备特殊专业知识的外科医生对这类患者进行恰当的治疗。随着这一领域的飞速进展，团队合作尤为重要，需要内分泌学家、病理学家、放射学家以及外科医生发挥各自的聪明才智对不同类型的内分泌肿瘤病人实施个体化治疗。美国内分泌外科医师协会成立后一年，国际内分泌外科医师协会在 1979 年诞生，从而使内分泌外科成为外科不可缺少的一个重要分支。

回顾历史，有数位外科医生曾经对内分泌学和内分泌外科学的发展做出了重要的贡献。早在 200 多年前，John Hunter 的外科实验已涉及巨人症和性腺功能的研究。Theodore Kocher，一位伟大的瑞士外科学家，为我们揭示了甲状腺疾病的奥妙，创建和发展了甲状腺外科，并延续至今而变动甚少。Harvey Cushing 描述了多种垂体肿瘤及其对内分泌和非内分泌组织调控的作用，特别是对肾上腺的研究。Frederick Banting，一名加拿大矫形外科医生和他的同事 Charles Best 共同发现了胰岛素。Robert Zollinger 和 Edwin Ellison 描述了伴有严重的消化性溃疡的胰腺胃泌素瘤。

当外科手术对许多伴有内分泌紊乱患者的处理成熟时，内分泌外科学诞生了。今后对于内分泌肿瘤患者的治疗，外科处理技术将不会有大的改变，而应寄希望于医学分子学的进展、新的药物及生物制剂的应用。今天许多需手术治疗的内分泌肿瘤将被药物治疗所取代。这是一个自然的衍化过程，我们应不断努力以发现新的方法。

Gerard M. Doherty 和 Britt Skogseid 两位医生运用其卓越的聪明才智和组织能力编撰了本书。作为一个内、外科团队，他们各自对内分泌内科学和内分泌外科学做出了重要的贡献。撰写本书的专家均是这一领域有深厚造诣的代表人物。内分泌外科学是一本优秀的专著，必将成为这一领域的经典书目。

Samuel A. Wells, Jr.

美国外科医师学会临床肿瘤学组主席

前 言

19 至 20 世纪，内分泌器官的研究无疑增添了许多内、外科思维的魅力。随着内分泌器官功能的发现，人体内分泌和代谢途径的病理状态得以揭示。内科精确诊断和外科精细手术的完美结合，使生理情况下机体的内分泌组织和病理情况下造成灾难性机体复杂内分泌代谢途径紊乱之间取得再平衡，获得了异乎寻常的成功。

本书综合了内、外科对甲状腺、甲状旁腺、肾上腺、胰腺内分泌和全身各处神经内分泌系统的知识。目的在于指导渴望了解内分泌疾病病理生理变化的外科医生以及有志于从事这些特异肿瘤研究的医学工作者的临床实践，并帮助内科医生掌握手术指征和进行准确的术前评估。内容涵盖了本系统疾病的外科评估、诊断以及处理策略。此外，专家们还揭示了内分泌肿瘤的分子生物学基础、家族性内分泌综合征的基因分子生物学知识和特殊问题的内分泌评估。

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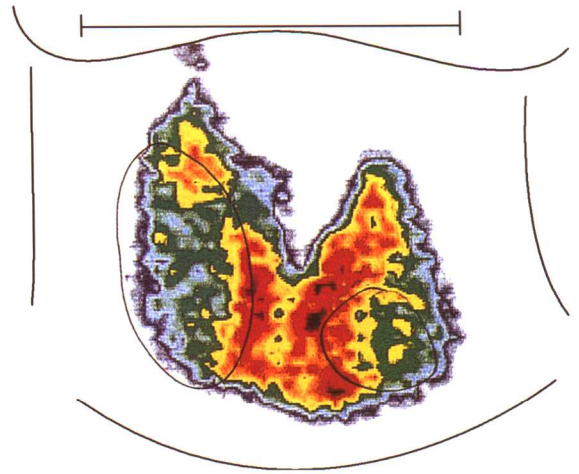
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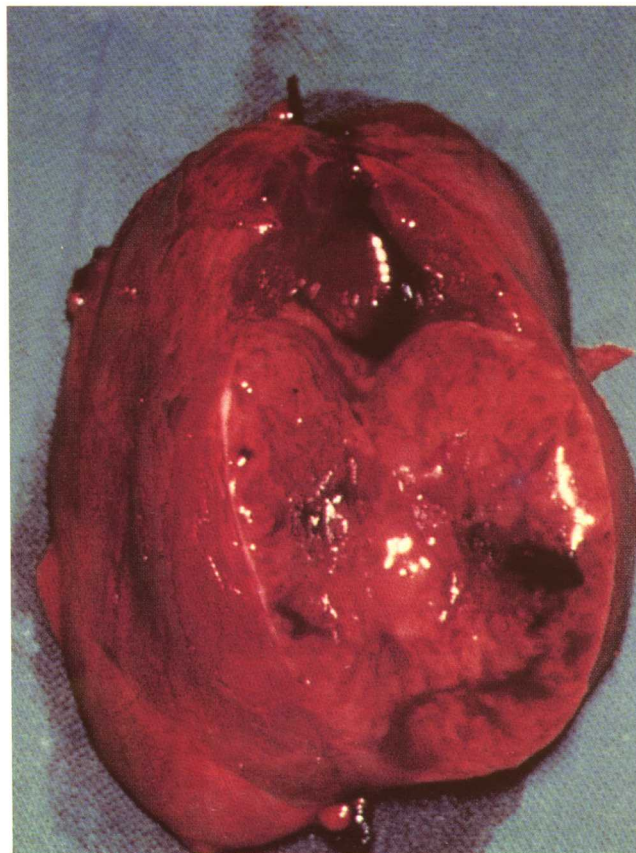
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彩图 1 (见图 4.5) 胸腔入口阻塞伴静脉阻塞, 由胸腔内多发性甲状腺结节引起。



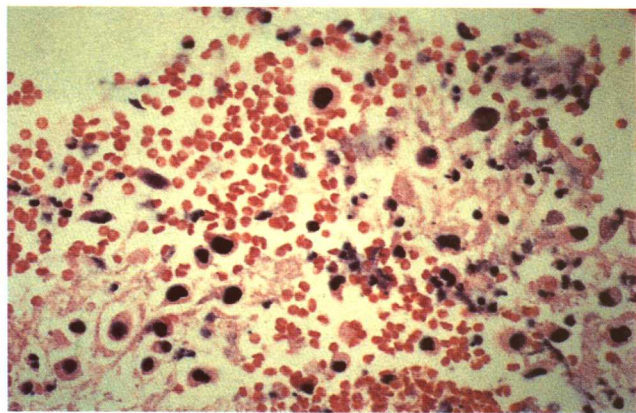
彩图 2 (见图 4.7) — 60 岁女性患多发结节性甲状腺肿。甲状腺核素摄取不均一。右叶显示大的冷结节, 左叶的尾部显示一小的冷结节。



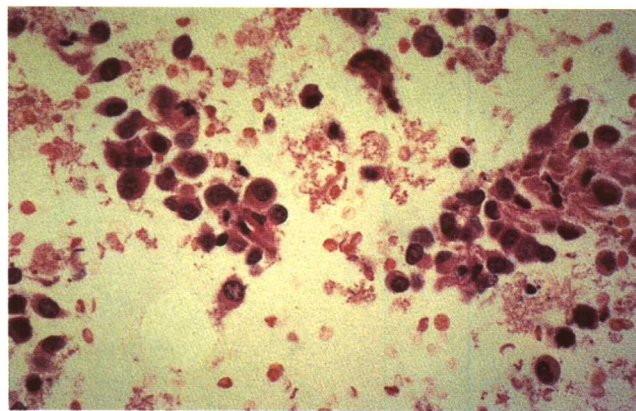
彩图 3 (见图 5.1) 甲状腺结节处理观点的争议。大多数孤立性甲状腺结节需要切除 (Leslie J Degroot, University of Chicago); 甲状腺结节: 通常需要手术切除 (Monte A. Greer, University of Oregon Medical School)。



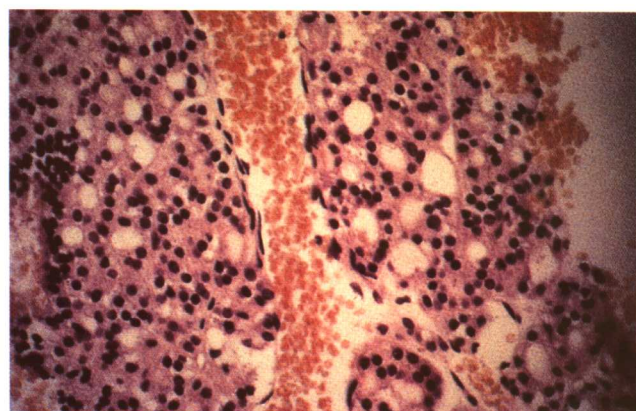
彩图 4 (见图 5.9) 乳头状甲状腺癌细针穿刺标本, 带有乳头, 核呈沟状, 核内包含物。采用细胞阻滞技术而非涂片而使乳头结构完整。



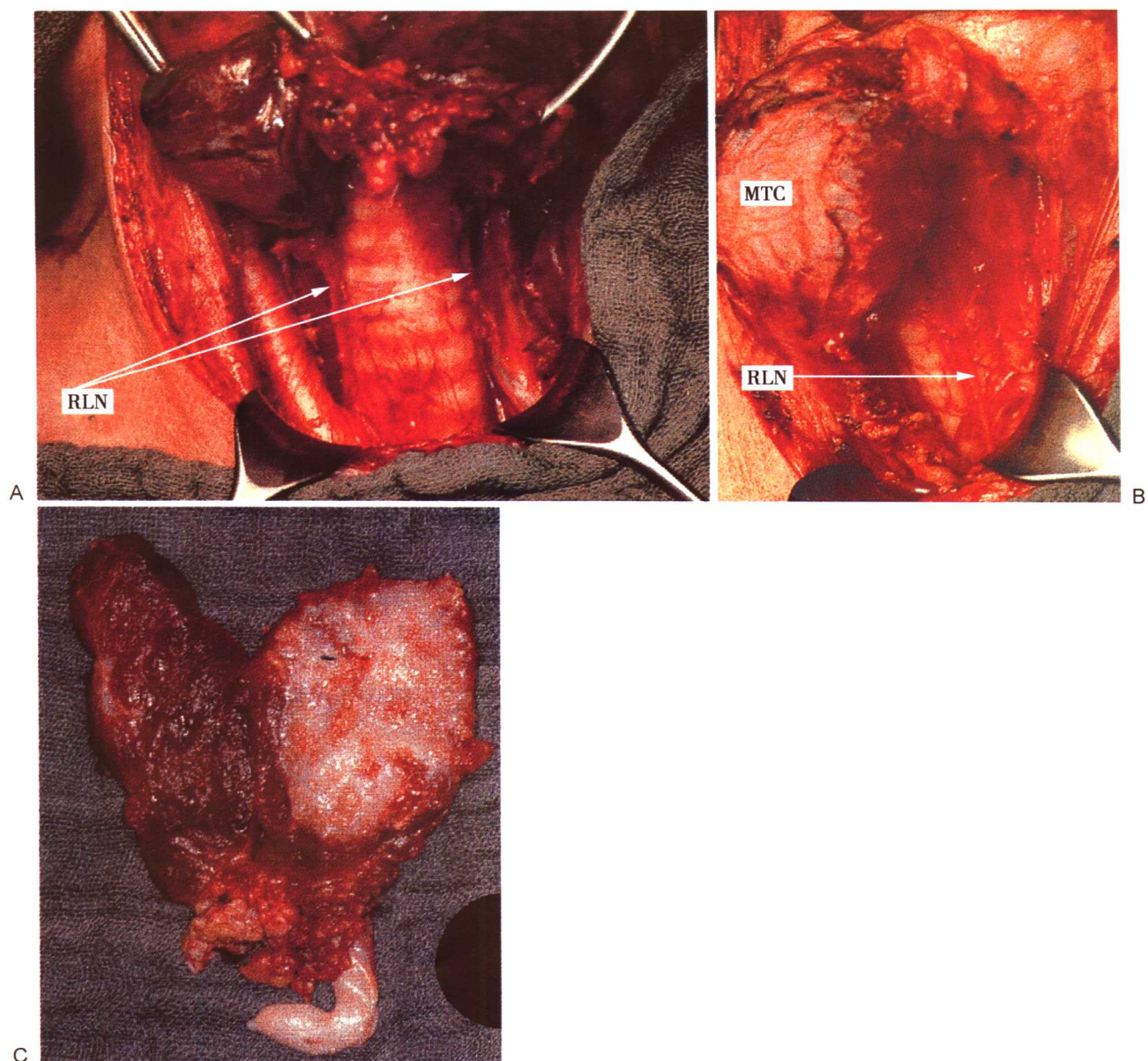
彩图 5 (见图 5.10) 未分化甲状腺癌的细针穿刺标本, 显示异乎寻常的的肿瘤细胞、巨大细胞和纺锤样细胞。



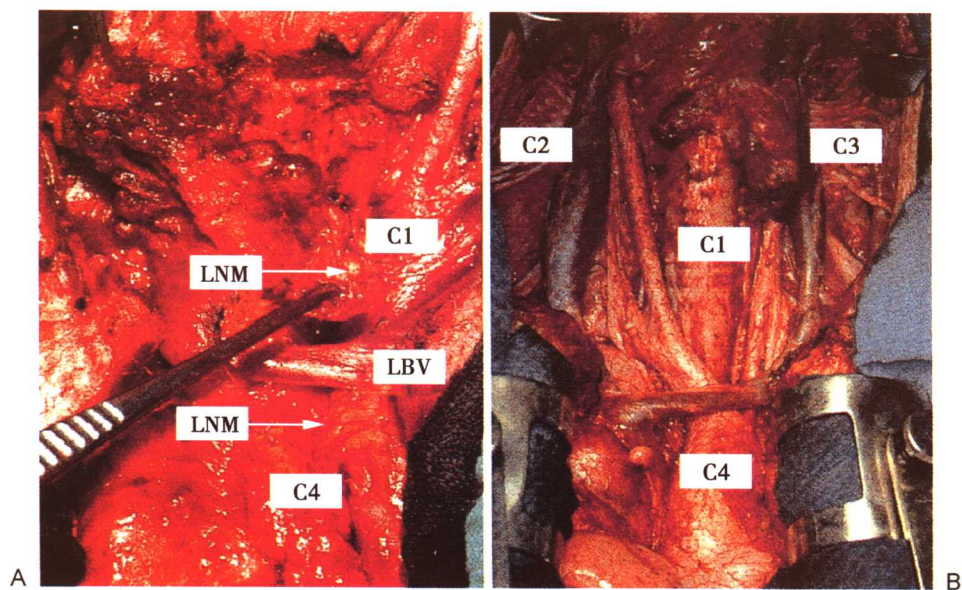
彩图 6 (见图 5.11) 恶性黑色素瘤甲状腺内转移结节细针穿刺标本。肿瘤细胞内含黑色素沉着。



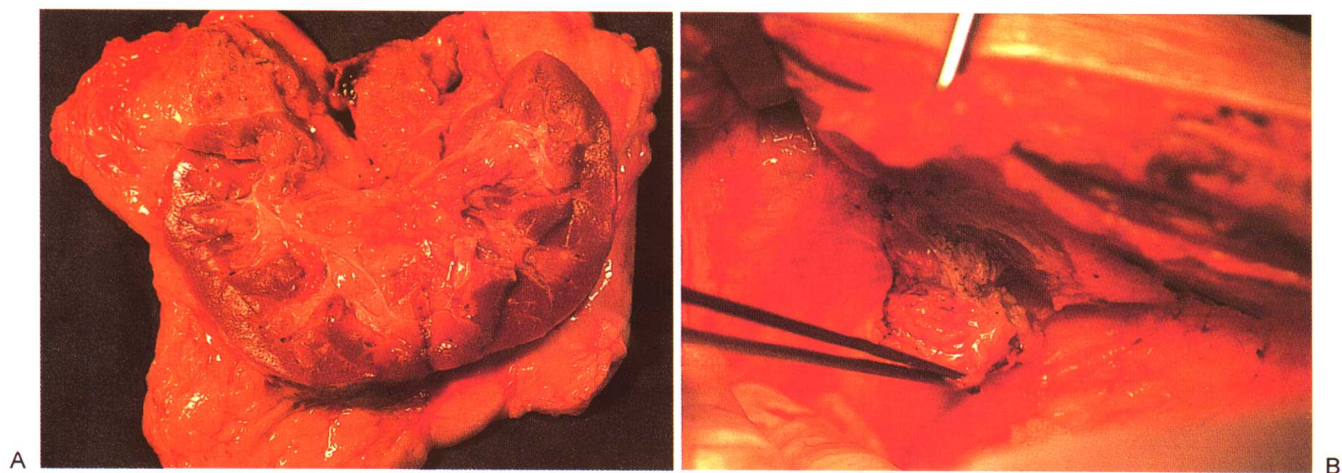
彩图 7 (见图 5.12) 滤泡状甲状腺癌细针穿刺标本, 显示簇状小滤泡、小腔隙和少量或无胶体。细胞阻滞技术。



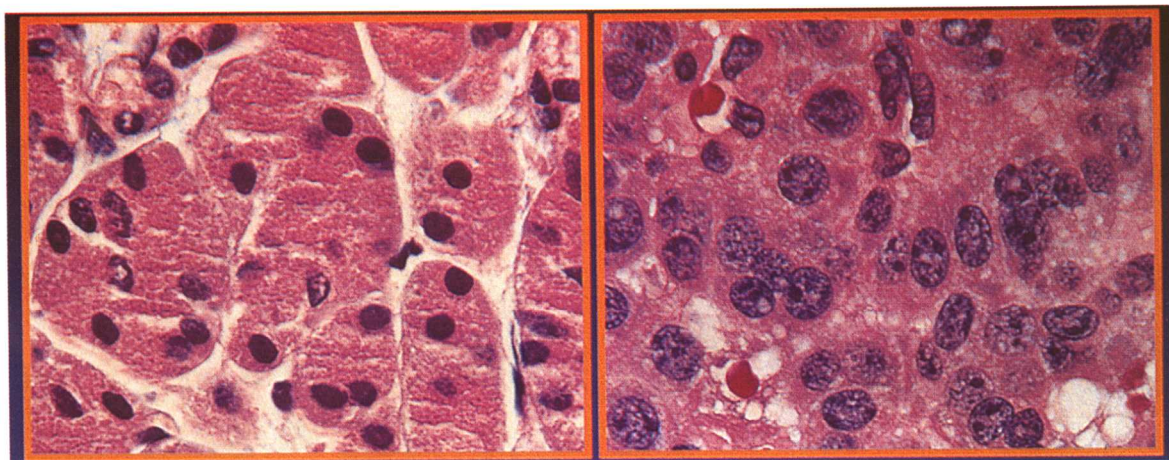
彩图 8 (见图 9.4) 甲状腺整块切除术 (en bloc) 和中央淋巴结清扫术。A: 双侧甲状腺叶以及颈部中央部分的整块切除标本。B: 左甲状腺叶内髓样腺癌的外观。C: 整块切除的手术标本 (左前叶切除后甲状腺髓样癌的切面)。RLN: 喉返神经。



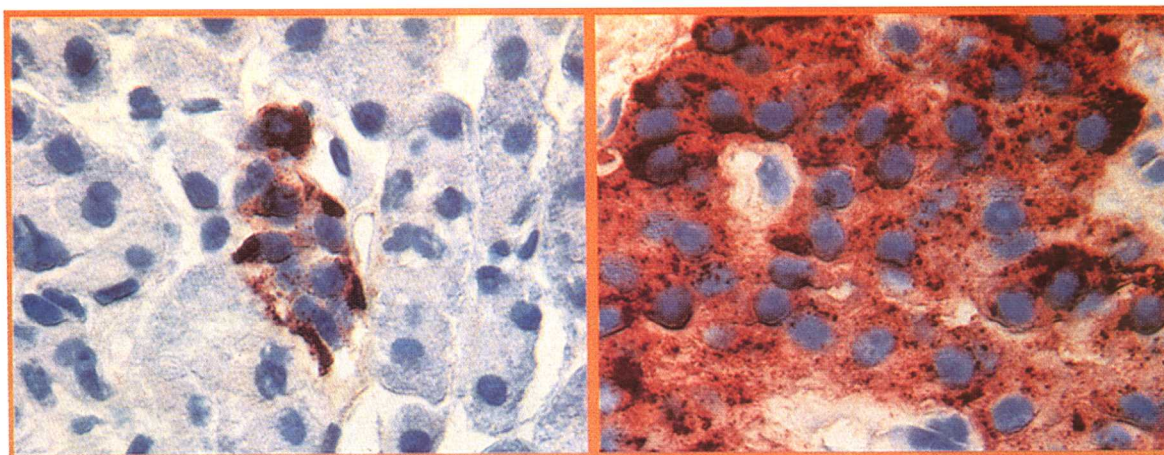
彩图 9 (见图 9.5) 1 例散发性髓样甲状腺癌患者, 39 岁, 行四个区域淋巴结清扫术。A: C1 和 C4 区域表现为颈部中央和纵隔淋巴结转移。LBV: 左头臂静脉。B: 四个区域淋巴结清扫术后的术中的情况 (C1~C4)。



彩图 10 (见图 20.1B、C) 该病人术前认为患 Cushing 腺瘤, 腹腔镜下行右肾上腺切除术。病理报告则为肾上腺癌。A: 手术标本显示右肾上腺极和肾门侵犯。B: 术中发现转移灶。转移种植灶 (下血管钳) 位于腹壁肌肉层间 (上血管钳)。也发现腹膜转移并切除。



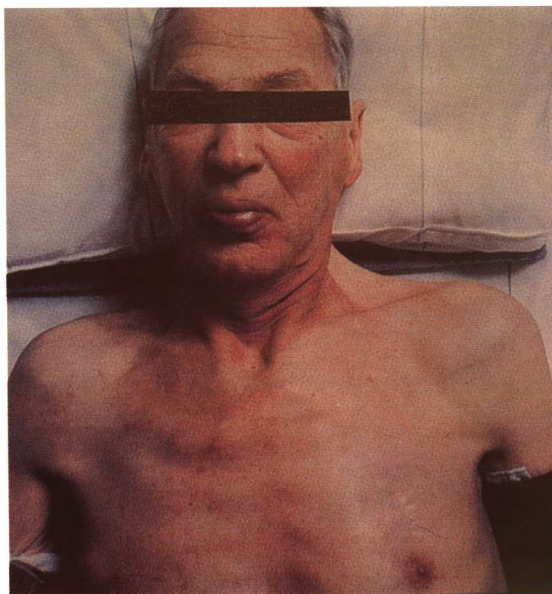
彩图 11 (见图 23.7) 正常胰腺的组织学 (左图) 和胰岛细胞瘤 (右图, HE 染色)。



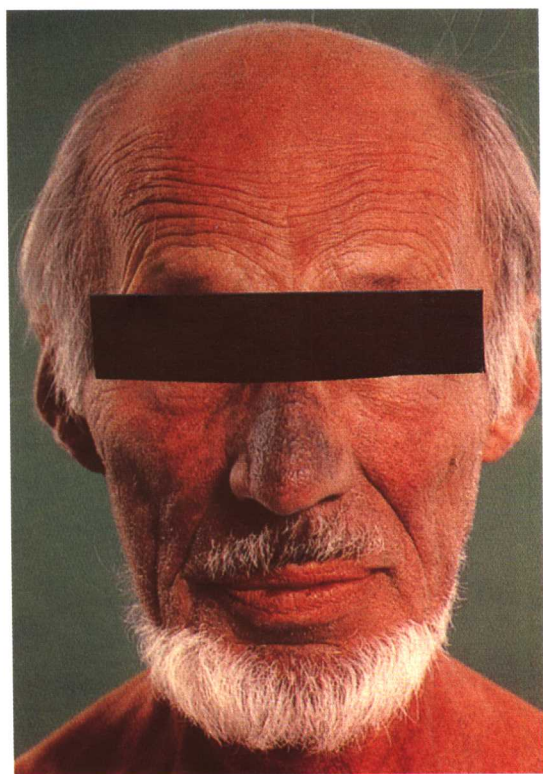
彩图 12 (见图 23.8) 正常胰腺细胞的免疫过氧化物酶染色 (左图) 和胰岛细胞瘤的特殊染色 (右图)。



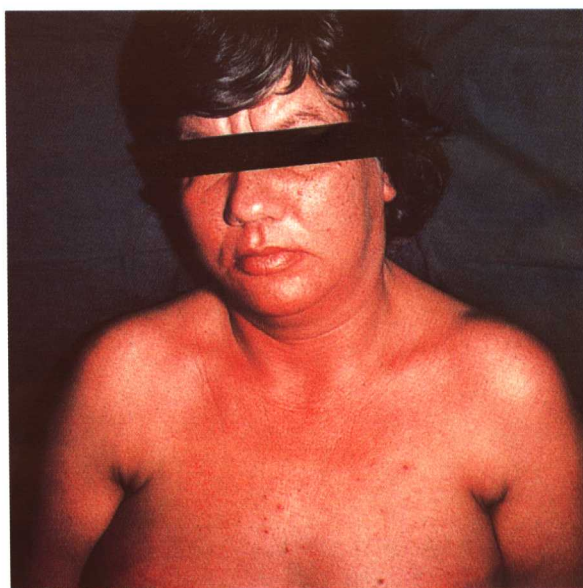
彩图 13 (见图 27.1) PET 图像显示胰腺尾部的胰高血糖素瘤。Serotonin 的前体物质 5-HTP 标记¹¹C 后 PET 扫描显示胰腺尾部很高的摄取率，同时也显示附近淋巴结转移，而 CT 的奥曲肽闪烁扫描未发现改变。



彩图 14 (见图 28.1) 类癌样潮红。该病人表现为与中肠类癌相关的典型弥漫性红斑样潮红。



彩图 15 (见图 28.2) 紫色潮红。此病人有与晚期中肠类癌有关的典型紫色潮红和面部毛细血管扩张。



彩图 16 (见图 28.3) 此病人具有前肠类癌典型表现：全身、持续时间长的潮红伴有流泪、涎腺肿大、面部水肿和有时有低血压。