

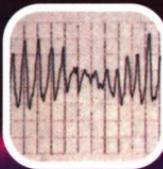
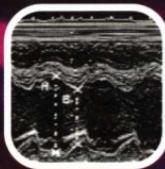
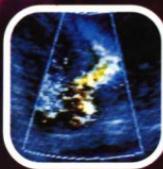
中英文对照

Cardiology *INfocus*



心脏病学聚焦

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Andrew A Grace
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心脏病学聚焦

Cardiology



IN focus

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Glyn Thomas, Peter M. Schofield, Andrew A. Grace

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著者前言

本书全面展示了现代心血管疾病的诊疗观点。心血管疾病的临床表现纷繁复杂，高新医疗技术在这一领域发挥了重要作用。

在收集本书图片资料过程中得到了许多同事的大力帮助，我们要特别感谢 Jim Hall 博士、Martin Lowe 博士一如既往的支持，感谢剑桥 Papworth 医院的心脏病学高级顾问 Hugh Fleming 博士允许我们使用其教学图片，还要感谢慷慨提供图片资料的 Bob Anderson 教授、Stephen Large 先生、Michael Petch 博士、Len Shapiro 博士、David Stone 博士、Edward Rowland 博士、Hugh Bethel 博士、K Ranjadayalan 博士、Abdul Suliman 博士、Fred Foo 博士、Neha Skhri 博士、A Deauer 博士以及 E Gorman 夫人。最后还要感谢 L Cunningham 博士。

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Rowan W Parks

译者前言

心血管疾病领域涉及内容广泛，新理论、新技术进展很快，各类图书众多，其中不乏鸿篇巨作，如何使读者在较短时间内了解心血管疾病重点问题呢？《心脏病学聚焦》在这方面就做得非常成功。

本书语言简洁，易懂易记。各章节篇幅不长，虽无深奥理论，但多为心血管常见疾病，概念清晰准确，重点突出，诊疗方法详实，包括了本专业的最新进展，临床指导性强，特别是配有精美清晰的图片资料，帮助读者直观地理解内容，读后豁然开朗。

本书为英汉对照版本，在获取医学知识的同时还可提高专业英语水平，既可供医学生、研究生、住院医师、全科医师学习提高，也可作为专科医生参考借鉴之用。

在翻译此书的过程中我们尽力做到词准意达，由于水平所限，可能存在不妥甚至错误之处，请各位同仁赐教指正。如果本书能够帮助读者解决一些临床实际问题，哪怕只是解除一个困惑，也就达到我们翻译此书的目的。

高竞生

2006年6月

于华北煤炭医学院附属开滦医院

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冠心病危险因素

冠心病危险因素

目前已确定许多因素影响冠状动脉粥样硬化的进程。

主要危险因素包括男性、年龄的增长、吸烟、高脂血症、高血压和糖尿病。次要危险因素包括冠状动脉疾病家族史、久坐的生活方式/肥胖、过量饮酒、凝血因素（纤维蛋白原、因子VII、纤维蛋白溶酶原活性因子抑制剂1、半胱氨酸水平升高）、生化标志物、C反应蛋白升高和心理压力增大（A型性格个体）。

吸烟

吸烟者心肌梗死的危险是非吸烟者的三倍。吸烟可导致高密度脂蛋白(HDL)胆固醇结构和功能发生不利改变，并直接影响冠状动脉的张力。吸烟还加大了其他危险因素所带来的不利影响。

高血脂

血脂增高是遗传与环境因素共同作用的结果。目前认为低密度脂蛋白升高(LDL)是最具冠心病危险的脂蛋白紊乱。在家族性高胆固醇血症患者中，其编码LDL受体的基因要么数量减少，要么功能异常，进而导致血浆中LDL胆固醇清除减少。杂合子患者（发病率约1:500）血浆胆固醇水平常可高达15mmol/L；纯合子患者（发病率约1:1 000 000）血浆胆固醇水平可大幅升高，达到15~30mmol/L。临床特征有角膜环、黄斑瘤和肌腱黄斑瘤。现已确认杂合子患者使用他汀类调脂药治疗有效。

高血压

高血压是冠心病重要的独立危险因素，可使发病危险性增加2倍。对单纯性轻至中度高血压进行药物治疗，可降低心肌梗死（15%）和卒中（40%）的危险。控制血压对合并其他危险因素的高血压患者如糖尿病益处最大。

Many factors have been identified that influence the progression of coronary atherosclerosis.

Major risk factors include male sex, increasing age, smoking, hyperlipidaemia, hypertension and diabetes mellitus. Minor risk factors include family history of coronary artery disease, sedentary lifestyle/obesity, excessive alcohol consumption, haemostatic factors (elevated fibrinogen, factor VII, plasminogen activator inhibitor 1, homocysteine levels), biochemical markers, elevated CRP and psychological stress (type A personality).

Smoking

The risk of myocardial infarction in smokers is three times that of non-smokers. The use of cigarettes leads to an unfavourable alteration in high-density lipoprotein (HDL) cholesterol structure and function as well as a direct effect on coronary vasomotor tone. Smoking multiplies the negative effect of other risk factors.

Hyperlipidaemia

Raised plasma lipids are due to a combination of genetic and environmental factors. Elevated low-density lipoprotein (LDL) has been implicated as the most significant dyslipidaemia implicated in coronary heart disease. In familial hypercholesterolaemia the gene that encodes the LDL receptor is either reduced in number or dysfunctional, leading to reduced clearance of LDL cholesterol from the plasma. Heterozygotes (incidence approximately 1:500) have elevated plasma cholesterol often up to 15 mmol/l. Homozygotes (incidence approximately 1:1 000 000) may have massively increased plasma cholesterol values, e.g. 15–30 mmol/l. Clinical features include corneal arcus, xanthelasma and tendon xanthomata. The benefits of statin therapy are now well established in heterozygotes.

Hypertension

Hypertension is established as a strong independent risk factor for coronary heart disease, leading to a twofold increase in risk. Drug treatment of isolated mild to moderate hypertension can reduce the risk of both myocardial infarction (15%) and stroke (40%). The greatest cardiovascular benefit of blood pressure control is seen in those patients with other risk factors, e.g. diabetes mellitus.



图 1 角膜弓和黄斑瘤
Corneal arcus and xanthelasma.



图 2 III型高胆固醇血症患者脂质沉着于髌骨周围
Lipid deposition around the patella in type III hypercholesterolaemia.



图 3 纯合子FH的年轻患者的左冠状动脉造影像显示弥漫性冠状动脉病变
Left coronary arteriogram from young patient with homozygous FH showing diffuse coronary disease.

术语

心绞痛是心肌缺血发作时的症状性表现，常常被描述为胸骨中段正后方钝痛，并向下颌和左臂放射。在病史中最重要的是心绞痛与运动的关系。临幊上常见的要线索是停止运动或舌下含服硝酸酯类药物后心绞痛症状迅速缓解。然而，诊断并非如此简单，因为不典型性胸痛很常见，且难以同真正的心绞痛区分开。

慢性稳定型心绞痛

预计运动或应激可诱发典型症状，尤其是天气寒冷或饱餐后。当心肌需氧量高于供氧量时就会出现心绞痛症状，其原因常为固定的粥样硬化性狭窄，引起一支或多支冠状动脉血流减少。

急性冠脉综合征

急性冠脉综合征是由于冠状动脉内不稳定斑块引发的相应临床表现。斑块破裂不一定导致 ST 段抬高和 Q 波形成，因此这种情况以前被称为不稳定型心绞痛，现称为非 ST 段抬高的急性冠脉综合征 (NSTEACS)。在病变迅速进展的情况下，休息或轻微活动时即可发生心绞痛。部分患者将出现细胞损伤性生化标志物升高，称为非 ST 段抬高的心肌梗死 (NSTEMI)。NSTEACS 也可能是冠状动脉张力改变的结果。这种少见的情况称为变异型或 Prinzmetal's 心绞痛。症状与 NSTEACS 相同。

病理学

动脉粥样硬化引起的冠状动脉狭窄是引发心绞痛的最常见原因，当冠脉病变达到危险程度时（狭窄 $>70\%$ ）常出现症状。但是病理研究强调：有些患者即使冠脉狭窄达 70% 时，仍可没有症状，以猝死为首发表现。

Coronary heart disease syndromes

2

Angina pectoris is the symptomatic manifestation of myocardial ischaemia. Angina is most frequently described as a central substernal dull ache with radiation to the jaw and left arm. The most important feature to establish in the history is the relationship to exercise. The rapid resolution of symptoms on stopping exertion or with sublingual nitroglycerin is often the most important clue obtained from the clinical history. However the diagnosis should never be considered simple: atypical chest pain is common and often difficult to distinguish from true angina.

Terminology

Chronic stable angina pectoris

Typical symptoms are predictably brought on by exercise or stress, particularly in cold weather or after a heavy meal. Symptoms occur when myocardial oxygen demand outstrips supply, usually because of a fixed atheromatous narrowing impairing flow in one or more of the coronary arteries.

Acute coronary syndrome

This term encompasses the clinical consequence of an 'unstable' plaque within the coronary artery. Plaque rupture may not necessarily lead to ST segment elevation and Q wave formation; hence this situation, formerly called unstable angina pectoris, is termed non-ST elevation acute coronary syndrome (NSTEACS). Angina occurs in a rapidly progressive pattern at rest or on minimal exertion. A proportion of these patients will develop a subsequent elevation in biochemical markers of cellular damage, termed non-ST elevation myocardial infarction (NSTEMI). NSTEACS may occur as a result of changes in tone within the coronary arteries. This uncommon condition is referred to as variant or Prinzmetal's angina. Symptoms are identical to those of NSTEACS.

Pathology

Coronary narrowing due to atherosclerosis is the most common cause of angina pectoris, with symptoms usually appearing when coronary artery lesions become 'critical' (>70% stenosis). Pathological studies, however, emphasize that even in the presence of most such lesions patients may be asymptomatic, the initial manifestation being sudden death.

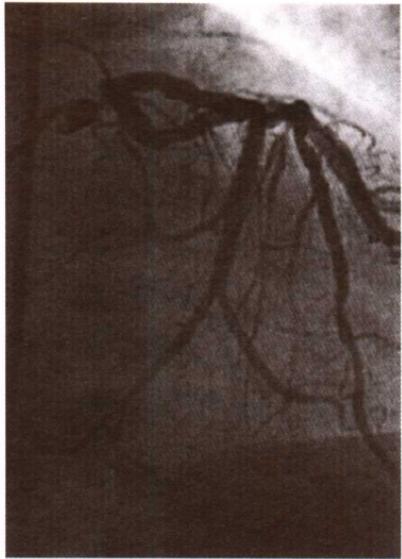


图 4 冠脉造影图像显示严重的左主干狭窄
Coronary arteriogram showing severe left main stem stenosis.



图 5 右冠状动脉中段狭窄
Coronary stenosis in mid right coronary artery.



图 6 动脉粥样斑块并腔内血栓形成的组织横切面图
Histological cross-section of an atheromatous plaque with luminal thrombus.

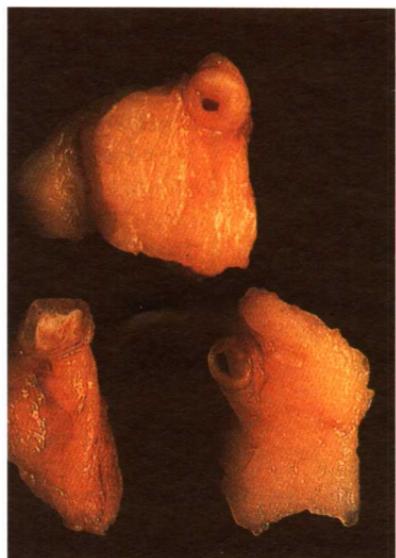


图 7 三支冠脉的横切面显示严重的三支病变
Transverse sections through the three coronary arteries showing severe three-vessel disease.