

Gerd Herold and colleagues

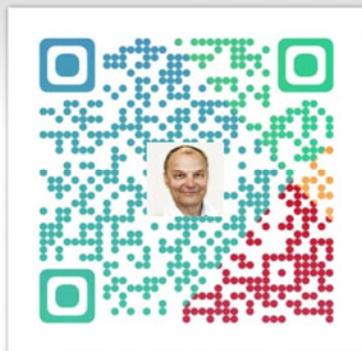
# INTERNAL MEDICINE

*second edition*

## Vol. I+II

A lecture oriented systematic and accurate representation of the complete topic catalogue for the medical examination for physicians

Systematically the complete topics of internal medicine · Accentuation of "pitfalls" which are important for exams · Taking account of the most important German and American textbooks · Therefore also recommended for the American ECFMG examination · Tables of biochemistry and haematology reference intervals with SI units · Taking account of "evidence based medicine" · ICD-10 codes within the text and the index



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# HEROLD's INTERNAL MEDICINE

## The complete topics of internal medicine

“Herold: Internal Medicine” has become a standard compendium of internal medicine in Germany, being published for nearly three decades now. It has been updated annually, therefore it always contains the actual knowledge of internal medicine and the latest medical guidelines.

The textbook gives an overview of the complete topics with detailed information about diagnosis and therapy. It has a clear structure which makes it easy to find the necessary information quickly; this makes it, as it has been written in a review, an “indispensable reference work for many physicians and a learning bible for many medical students” who use it for preparing for their exams.

Or as it has been written in another review, “the reader can find all subject areas logically arranged and therefore clearly represented. The arrangement of the chapters is always the same, thus making a good overall view possible.”

A third review describes it as follows: “Within a very short time, the reader receives a host of information and feels well informed about every subject area. In order to understand deep reaching connections, it is partially necessary to consult a more comprehensive book on internal medicine. In general, though, »Herold« definitely is sufficient for covering the necessary knowledge on this subject. (...) The facts are presented in well readable sentences and key points. Therefore, fast reading and structured learning are very well possible. Apart from important pieces of advice for hospital work, the reader also gets useful information for making a diagnosis.”

Another review describes it like this: “Such topicality is rare amongst textbooks, however it is essential in day-to-day medical practice. (...) The textbook ranges far below the average of comparable (content) textbooks, in which the price is now rapidly approaching € 100. It is a textbook with an excellent price-performance ratio.”

Because of its success, the textbook has been translated into several languages. And now it finally is available in the *Second English Edition*.

Get the book at your local bookstore or online-bookstore

Get more information at [www.herold-internal-medicine.com](http://www.herold-internal-medicine.com)

But first see what makes *Herold's Internal Medicine* different from other reference textbooks and get an impression of the features that make it so special:

# Some examples from the chapter "Cardiology"

Table of contents for this chapter:

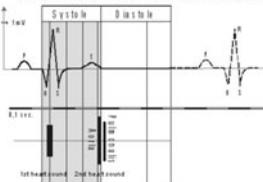
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Classifications and informative graphics:

### Classification of heart sounds (HS):

#### A) Valve closure sounds:

The 1<sup>st</sup> heart sound (S1) corresponds to the closure of the mitral and tricuspid valves and ventricular contraction (contraction sound) and appears 0.02 – 0.04 seconds after the beginning of the QRS complex.  
The 2<sup>nd</sup> heart sound (S2), which is shorter and clearer than the 1<sup>st</sup> heart sound, is caused by the closure of the aortic and pulmonary valves (arterial valves). The 2<sup>nd</sup> heart sound occurs at the end of the T-wave; it is best heard in the 2<sup>nd</sup> intercostal space (ICS) parasternal right (aortic valve) and left (pulmonary valve).  
Increased pressure in the pulmonary circulation results in a louder pulmonary valve component, an increase in pressure in the systemic circulation results in accentuation of the aortic component.



- Physiological splitting of the 2<sup>nd</sup> heart sound arises from the non-simultaneous closure of the aortic and pulmonary valves; the aortic sound normally occurs before the pulmonary sound. With deep inspiration, a physiological splitting of up to 0.08 seconds can be heard and is usually only audible under these conditions (due to negative thoracic filling pressures during inspiration and thus a temporary increased inflow into the right ventricle during diastole).
- Exaggerated (pathological) splitting of the 2<sup>nd</sup> heart sound occurs with right bundle-branch block
- Fixed (independent of respiration) splitting of the 2<sup>nd</sup> heart sound with
  - Atrial septal defect
  - Pulmonary artery stenosis
- Paradoxical (reversed) splitting of the 2<sup>nd</sup> heart sound (first pulmonary, then aortic segment) with
  - severe aortic and aortic isthmus stenosis
  - left bundle-branch block, cardiac pacemaker with right ventricular stimulation

DL: Simultaneous recording of carotid pressure pulse + phonocardiogram: The aortic component of the S2 normally occurs 0.04 seconds before the incision of the pulse curve.

Overview of therapeutics:

### Selection of antihypertensives according to concomitant disorders:

Concomitant disorder (examples)	appropriate (+) / antihypertensives	inappropriate (-) / explanation
Heart failure	(+) ACE inhibitor, ARB (+) metoprolol, bisoprolol, carvedilol (+) diuretics (-) verapamil	Pre- and afterload decrease, improvement of prognosis Preload decrease Negative inotropic effect
Bradycardia	(-) beta-blocker (-) verapamil (-) diltiazem	Negative chronotropic effect
Coronary heart disease	(+) cardioselective beta-blocker	Anti-angina effect Improvement of prognosis
Status post myocardial infarction	(+) beta-blocker (+) ACE inhibitor	Improvement of prognosis
Arterial occlusive disease	(-) beta-blocker	Worsening of AOD (contraindication)
Metabolic syndrome, diabetes mellitus	(+) ACE inhibitor, ARB (-) beta-blocker, diuretics	Nephroprotective, metabolically neutral Increased risk of diabetes
Gout	(-) diuretics	Increase in uric acid
Bronchial asthma	(-) beta-blocker	Bronchoconstrictive side effects
Renal insufficiency	(-) potassium-sparing diuretics (+) loop diuretics	Danger of hyperkalemia (contraindication)

### Antihypertensives:

- **Diuretics** are given in low doses as antihypertensives (e.g. chlorthalidone 12.5 – 25 mg/day). No further lowering of blood pressure is achieved by increasing the dose. Diuretics are often used in combination with other antihypertensives. Diuretics have a rather unfavorable effect in diabetes mellitus. (details: see section on heart failure)
- **Beta-blockers:** The ESC guidelines continue to include beta-blockers among the 5 antihypertensives of first choice, even if there are differing opinions regarding this. For post-infarction patients or those with heart failure, beta-blockers are indispensable for a prognostic viewpoint. Beta-selective beta-blockers without an intrinsic sympathomimetic effect are preferred for antihypertensive therapy (details: see section on antiarrhythmics).
- **ACE inhibitors (angiotensin):**
  - Effect: Blocking of the angiotensin-converting-enzyme, which converts angiotensin I into the vasoconstricting angiotensin II = Result:
  - Decrease in peripheral vascular resistance due to reduced angiotensin II production
  - Reduction of angiotensin II-induced stimulation of the sympathetic-adrenergic system and catecholamine release
  - Reduction of aldosterone and ADH secretion and therefore reduction of sodium and water retention with subsequent decrease in volume
  - Inhibition of the breakdown of the vasodilator bradykinin (= synergistic effect)
  - Regression of left ventricular hypertrophy
  - Improvement of prognosis in patients with heart failure (e.g. CONSENSUS, SOLVD Study)
  - Reduction of cardiovascular mortality rate in cardiovascular risk patients (e.g. HOPE Study)
- The cardioprotective effect is explained by the tissue effects of ACE inhibitors, which include the heart and blood vessels (tissue renin-angiotensin system). The majority of ACE inhibitors are prodrugs which are then hydrolyzed in the liver into their "active" Captopril and lisinopril are active ingredients. ACE inhibitors do not cause any negative changes in the lipid and glucose metabolism. In patients treated with ACE inhibitors, the risk of cancer is supposed to be lowered.
- Interactions: Hyperkalemia if ACE inhibitors are combined with potassium-sparing diuretics and/or potassium preparations or cyclosporine. Possible reduction in the effect of ACE inhibitors by NSAIDs. Serum lithium levels may rise if lithium is given concomitantly. The risk of leucopenia rises with the concomitant administration of allopurinol. Hyperglycemia has been observed in diabetics when given concomitantly with insulin or oral antidiabetic agents (= possible dose reduction).
- Side effects: Dry cough is relatively frequent (5 – 10%) and is mediated by bradykinin; headache, dizziness, gastrointestinal disorders, hyperkalemia (do not combine with potassium-retaining diuretics). Other side effects are rare: Disorders of the sense of taste, profuseness, menorrhagic/purpuric disorders, cholestasis, myalgia, leucopenia, neutropenias, angioedema, vasculitis, allergic pulmonary changes, exanthema, increased risk of hyperkalemia in diabetics, etc.

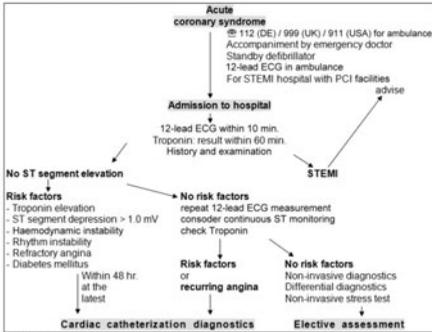
Name of the disease in frame, ICD-code in addition, clear structure: Synonym, Definition, Epidemiology, Aetiology, Clinic, Differential diagnosis, Diagnosis, Therapy, Prognosis, etc., to get the necessary information quickly:

### Functional cardiac pain [F43.3]

- Syn:** Cardiac neurosis, cardiac phobia, cardiac anxiety syndrome, Da Costa syndrome
- Def:** Chronic recurring thoracic symptoms without evidence of any somatic cardiac condition. The patients feel that something is wrong with their heart, however there is no objective organic finding that explains the symptoms.
- Comon:** approx. 15 % of patients, who see a doctor for suspected heart symptoms; the majority of patients are < 40 yr old.
- Aet:** Psychogenic/psychosomatic: Increased tendency for anxiety and disordered processing of fear, over-caucasian personality type, vegetative lability.
- Cl:**
  - Thoracic pain (usually at rest, which occasionally can radiate into the arms)
  - Sometimes hyperventilation
  - "Heart attacks" with tachycardia, feeling of panic, anxiety attacks, fear of dying, globus sensation, feeling faint, sweating, shivering
  - Continuous preoccupation with the possibility of having a cardiac disease, protective tendency, exaggerated need for control with fear that something is overlooked. Close doctor-patient relationship, pedantic following of doctor's instructions.
- DD:** Organic diseases (cardiac: arrhythmia, CHD, MI, recurrent PE, hypertrophicoid, cervical and thoracic spine syndrome, etc.); see also DD of angina pectoris
- Di:**
  - History (younger patients with similar symptoms persisting for years and repeated cardiological examination without any pathological findings)
  - Exclusion of organic disease (physical examination, BP, ECG, ergometry, 24h ECG, laboratory screening including basal TSH), possibly additional cardiological examination with echo and DXR/ECG, etc.
- Th:**
  - Reassure the patient about the innocuousness of the symptoms (invis psychotherapy in the context of the office consultation)
  - Relaxation techniques, physical training
  - If tachycardia or extrasystoles are present, consider beta blockers
  - Psychotherapeutic therapy
  - If symptoms are severe, consider the temporary use of tranquillisers (no long-term therapy) Caution: drug dependency!
- Pro:** In general, prod. in > 50 % of cases, the problem becomes chronic with frequent physician consultations, unnecessary consumption of various medicines, unnecessary hospitalizations

Schematic overview of diagnosis and therapy, schematic hints for emergencies:

Treatment of acute coronary syndrome:



See also *Infusec (p)g*  
**Initial treatment**  
 - Oxygen inhalation via nasal tube (4-8 l/min), pulse oximetry check  
 - Unfractionated heparin (100 iU/kg body wt., max. 5000 iU, as bolus) or low molecular weight heparin, e.g. Enoxaparin (dose: see manufacturer's specifications)  
 - ASA (initially 250 - 500 mg; later 100 mg/d) and Clopidogrel (loading dose: 600 mg for intervention within 2 hr or 300 mg for interventions after 12 hr), maintenance dose: 75 mg/d, clopidogrel in addition to ASA lowers the risk by 20 % (CURE trial)  
 - Nitroglycerin (1 - 5 mg) IV via perfusor (caution with blood pressure > 90 mm Hg and/or higher grade AV-Block)  
 - Beta-blockers, taking into account side effects and contraindications: optimal heart rate = 60/min  
 - ACE-inhibitors if there is insufficient blood pressure following from nitroglycerin and beta blockers  
 - For severe pain, optionally Morphine 5 mg IV  
 - For vagal reactions, atropine 0.5 mg IV (can be repeated)  
 - For nausea / vomiting, metoclopramide (e.g., Metoclopramide)  
**Further treatment depends on ECG and laboratory parameters (CK, CKMB, Troponin I or T)**  
 1. Acute myocardial infarction with initial ST-segment elevation (STEMI), for treatment see Ch. Myocardial infarction  
 2. NSTEMI = Unstable APMYocardial infarction without ST segment elevation, but increase in cardiac muscle specific laboratory parameters. Rapid performance of a cardiac catheterization with the option for revascularization therapy within 24 to 48 hours.  
 3. Unstable AF without increase in cardiac muscle specific laboratory parameters (on admission and 6 - 12 hours later). Stabilize the patient and perform an ischaemia test (revenue ECG, myocardial scintigraphy or stress echocardiography) - if the result is positive: indication for cardiac catheter examination with the option for revascularization treatment.

Tables and formulas:

Stage classification of heart failure (CI) according to subjective symptoms (NYHA stages of the New York Heart Association)

NYHA Stage	Subjective symptoms of CI	ABCO groups
I	Freedom from symptoms, normal physical endurance	B
II	Discomfort with strenuous physical exertion	C
III	Discomfort even with mild physical exertion	D
IV	Symptoms at rest	D

NYHA stage classification of heart failure correlated with objective criteria:

NYHA Stage	Endurance	Cardiac output	Spirometry: Max. O <sub>2</sub> uptake (max. VO <sub>2</sub> in ml/kg/min)
I	up to 150 W and more (+ 1.5 - 2 W/kg)	Cardiac output normal at rest and during exertion	> 25
II	up to 100 W (+ 1 - 1.5 W/kg)	Cardiac output adequate at rest and during exertion	15 - 25
III	up to 50 W (+ 1 W/kg)	Cardiac output reduced during exertion	5 - 15
IV	Stress test not possible	Cardiac output reduced at rest	< 5

Diagnosis:

1. Clinical (NYHA stage)
2. BNP (normal BNP values exclude heart failure when clinical examinations are inconclusive)
3. Non-invasive diagnostic imaging procedures:
  1. ECG: Evidence of systolic dysfunction  
 Percent fractional shortening = FS (normal ≥ 25 %) correlates approximately with the ejection fraction  

$$FS (\%) = \frac{EDD - ESD}{EDD} \times 100$$
 EDD = end-diastolic diameter of the left ventricle  
 ESD = end-systolic diameter of the left ventricle  

$$EF = \frac{EDV - ESV}{EDV}$$
 EF = ejection fraction  
 EDV = end-diastolic volume  
 ESV = end-systolic volume  
 - The planimetric determined ejection fraction is more accurate  
 - Detection of a diastolic dysfunction (Doppler technique) = 4 stages: 1. Abnormal relaxation, 2. Pseudonormalization, 3. Reversible restriction, 4. Irreversible restriction  
 Measurement of the transmural flow via CW-Doppler (E- and A-wave) and as well measurement of the tissue velocity in the mitral annulus via tissue Doppler echocardiography (E- and A'-waves) From the the quotient E/A, can be calculated. Readings > 10 for E/E' indicate a diastolic dysfunction, readings of < 8 practically exclude it.
  2. Chest X-ray in 2 views:
    - To left heart failure: signs of pulmonary congestion
    - Signs of pulmonary congestion = g
    - Kerley B lines: horizontal streaks up to 1 cm long in the lower lobes = congested lymph vessels in the presence of interstitial edema
    - densely congested hilar vessels, enlarged congested pulmonary veins (in the hilar region)
    - ground-glass opacity in the presence of alveolar pulmonary oedema = possibly peroral effusion

Important facts are marked with grey background:

Information about drugs, interactions and doses:

Class III anti-arrhythmics: potassium channel blockers

**Amiodarone**  
 Repetition rate: 50 mg, 150 - 200 mg/d = cumulative risk Class I - IV mechanism of action  
 Ind: severe symptomatic AF with the target of permanent rhythm normalization. If this cannot be achieved in cases of permanent AF even with the use of electrical cardioversion, amiodarone may not be used simply for frequency deceleration (rate of side effects too high)  
 Acute supraventricular and ventricular tachycardia in urgent need of treatment in patients with heart failure  
 In patients who are at risk of VF (sudden cardiac death), treatment with Amiodarone cannot guarantee a decrease in the overall mortality. In one study, the mortality rate even elevated  
 CI: allergy to iodine, thyroid diseases, etc.  
 SE: central neurologic symptoms sometimes associated with visual deterioration, photosensitivity, hepatitis, pneumonia, pulmonary fibrosis, peripheral neuropathy, proarrhythmic effects (e.g. Torsades de pointes tachycardia), odore alenica, functional thyroid disorders, etc. Due to its iodine content, Amiodarone is contraindicated in thyroid autoimmune nodules or hyperthyroidism (pregnancy/sterilization of hyperthyroidism). Beware of any other Oral Approx. 25 % of patients discontinue therapy because of SEs. Check thyroid function prior to the use of amiodarone!  
 Dose: e.g. Cordarone® see manufacturer's instructions  
**Bepridil**  
 Ind: regularization of AF in patients without organic cardiac disease  
 SE = CI: See beta blockers; in approx. 5 % of cases, proarrhythmic SEs will be encountered (e.g. Torsades de pointes ventricular fibrillation), watch out for QT-prolongation (CI!)  
 CI: Pre-excitation syndrome, decompenated heart failure (NYHA III and IV), sick sinus node, AV block > 1°, severe hypotension, etc.  
 SE: cardiac conduction delay, bradycardia, blood pressure drop, negative inotropy  
 Gastrointestinal: constipation, nausea  
 Central nervous system: headache  
 Further: Abusive rash, increased excretion, flush, joint oedema  
 Interact: Do not combine with beta blockers = risk of higher grade conduction block!  
 Calcium antagonists of the phenylalkylamine type: e.g. Diltiazem, Verapamil  
 In A, Theophyllin, Carbamazepin = induce dose of these medications and check plasma level, if necessary  
 Bioavailability of Verapamil = 20 % (due to first pass effect in the liver)

Substance	Trade name	Mean oral daily dose (mg)
Verapamil	As non-proprietary name	1 x 180 - 240
Diltiazem	e.g. Procorum®	3 x 25 - 50
Diltiazem	As non-proprietary name	3 x 60 - 90

Parenteral administration of Verapamil 5 mg slowly (over 5 minutes) IV, ideally under ECG monitoring, if necessary repeat the dose after 30 minutes.

DD: Cyanosis [H2.6]

**Def.:** Bluish coloration of the skin or mucous membranes  
**1. True cyanosis**  
 A) Haemoglobin cyanosis  
 Haemoglobin cyanosis occurs if the concentration of deoxygenated Hb in the skin capillaries is ≥ 5 g/dl. In erythrocytosis (thrombocythemia), cyanosis appears earlier than with anaemia, in cases of severe anaemia with 10 values around 5 g/dl, cyanosis may no longer appear  
 Chronic hypoxia leads to erythrocytosis (↑ haemoglobin) and possibly hyperbolic coloration/rouffage (Perni-Mane-Bamberger syndrome) with clubbing of the fingers and toes as well as lipocyanotic rashes (History: Rarely, Marie Bamberger syndrome can also occur as paraneoplastic syndrome with various tumours.)  
**Notes:** The presence or absence of cyanosis does not permit any reliable conclusions regarding the O<sub>2</sub> supply to the tissues. In CO poisoning with formation of carboxylated HbCO, the skin becomes rose-colored (normal O<sub>2</sub> saturation in pulse oximetry) and the patient dies from lack of O<sub>2</sub>. In cases of pruritic anaemia as well, there is no cyanosis in spite of a deficiency of O<sub>2</sub> in the tissues. On the other hand, cyanosis may occur in cases of pronounced erythrocytosis (thrombocythemia) with sufficient arterial O<sub>2</sub>.  
 1. Central cyanosis:  
 Reduced O<sub>2</sub> saturation of the arterial blood (pulse oximetry)  
**Characteristics:**  
 - Skin = longitudinal mucous membrane cyanotic (in peripheral cyanosis, the longitudinal mucous membrane are not cyanotic)  
 - Lentic last: After massaging the earlobes (until there is a capillary pulse), the earlobes remain cyanotic in central cyanosis (peripheral cyanosis, the blue coloration disappears).  
 - Pulmonary cyanosis: insufficient oxygenation of the blood in the lungs due to pulmonary disease.  
**Characteristics:** After breathing in pure O<sub>2</sub> for several minutes, pulmonary cyanosis is reduced (but not, on the other hand, in cases of cardiac cyanosis due to right-left shunt).  
 - Cardiac cyanosis: Mixing of venous with arterial blood due to right-left shunt defects.

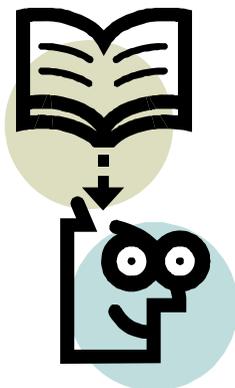
...so you know where to pay attention:

3. Cardiac hypertrophy:  
 Acute heart failure leads to dilatation of the heart  
 In chronic heart failure, the type of strain plays a role  
 - Volume load (e.g. valve regurgitation) leads to eccentric hypertrophy (↑ hypertrophy with dilatation)  
 - Pressure load (e.g. valve stenosis, hypertension) leads to concentric hypertrophy (↑ hypertrophy without dilatation)  
**Notes:** If compensatory myocardial hypertrophy exceeds a critical limit, heart failure worsens.  
 Once the critical heart weight of about 300 g is exceeded, a relative coronary insufficiency with reduction in the performance of the heart develops and diastolic dilatation occurs. Ventricular dilatation occurs, through diastolic induced programmed cell death (apoptosis), to further dilatation.  
 Failure of the physiological hypertrophic compensation possibilities for maintaining adequate pump performance of the heart is called decompensated heart failure.  
**Attention:** Compensated heart failure can also become decompensated in the presence of non-cardiac disorders that have an unfavorable effect on heart function, e.g. pneumonia, anaemia, polychemia, hypertrophy with renal insufficiency, etc.

Visit [www.herold-internal-medicine.com](http://www.herold-internal-medicine.com) and get an excerpt from the chapter “Cardiology” for free, including coronary heart disease and myocardial infarction.

Or visit [www.lulu.com/spotlight/herold\\_internal\\_medicine](http://www.lulu.com/spotlight/herold_internal_medicine) to order the book.

*HEROLD – because it's legend.*



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## **Reviews** (originally in German)

### **Book Review "Herold Internal Medicine 2010" (amazon.de)**

#### Indispensable bible of internal medicine

The book has become an indispensable reference work for many physicians and a learning bible for many medical students. (...) The author wrote this book based on his lecture notes during his specialist medical training for internal medicine. Due to its positive response, it became a long-lasting success of medicine.

The presentation does not stray off into confusing texts; it is short but accurate, to Van der Rohe's guiding principle: Less is more. The language is easy to understand.

#### Classic

For everyone who likes dense but comprehensive presentations, it is an absolute MUST.

Up to date.

### **Book Review "Herold Internal Medicine 2009" (amazon.de)**

#### Concentrated facts

One need not argue about the didactic structure. Buying this book means to make a compromise with the fact that this textbook does not have a typical didactic structure. But this is certainly not the purpose of the book. Annual updates consider the latest medical guidelines. What other book can offer this?

Nevertheless, this book also includes a variety of simple yet informative charts.

#### An absolute Must for medical students

This book is an absolute Must for every medical student. It is a very well structured book of reference, where all internal diseases and their treatment according to the latest guidelines can be looked up. It is also extremely useful for clinical internship for preparing for the final exam.

#### There is no alternative

This is a reference book without any alternative – it is second to none. It has everything one needs for the day-to-day clinical work or for crash learning. It should be in every book shelf.

#### Indispensable!

After having gained an overview of the book's contents, it is clear that one can really find all data relevant for the final exam.

#### Not just a lecture-script

...also for many non-internists, this book is an absolute must-have. Working in a field like neurology, one is frequently confronted with internal medical problems, e.g. in case of stroke or elder patients, I used to consult my colleagues from different specialties about blood pressure treatment, antibiotics for chest infections after aspiration etc. several times a day. Now, the latest "Herold" edition is always a good first helper to turn to. In order to be reasonably up to date, I buy a new edition every 3 years. It is the only book on internal medicine which has survived the long years on my desk in the latest edition. In case I should need to consult an internist, "Herold" will help me filling in the request form by asking a practical question.

#### Superb overall view

The book offers explanations in a brief yet detailed way. It is easy to understand the texts (always popular with doctors... student nurses also appreciate it).

### **Book Review "Herold Internal Medicine 2005" (thieme.de/medi-learn.de)**

#### Brief Description

"Herold" is a compendium of Internal Medicine. In 17 chapters, the reader can find all subject areas logically arranged and therefore clearly represented. The arrangement of the chapters is always the same, thus making a good overall view possible.

#### Target group

"Herold" is suited for all students who have passed their preliminary medical examination, for clerkship and medical assistants. It is an excellent study- and revision book both for examinations and for the daily hospital work.

#### Contents

"Herold" is a compact reference work with a tendency to a textbook. For every particular disease there is a list of causes, differential diagnosis, pathogenesis, progression, diagnosis, therapy and prognosis. Every subject is treated soundly and contains the essentials. Due to the yearly revision, innovations in therapy and diagnosis can be considered in the current edition.

Within a very short time, the reader receives a host of information and feels well informed about every subject area. In order to understand deep reaching connections, it is partially necessary to consult a more comprehensive book on internal medicine. In general, though, "Herold" definitely is sufficient for covering the necessary knowledge on this subject.

What I appreciate most are important remarks and pieces of advice which can be very helpful for the daily work in the hospital. Moreover, important German and American textbooks (e.g. Harrison) are being considered. For this reason, "Herold" is also recommended for the USMLE-exam of the ECFMG.

#### Didactics

The facts are presented in well readable sentences and key points. Therefore, fast reading and structured learning are very well possible. Apart from important pieces of advice for hospital work, the reader also gets useful information for making a diagnosis.

You simply have to like Herold's style of writing to have the most important facts almost pocket-sized at hand. For all those, however, who love big textbooks with many pictures, coloured charts, theorems or revisions, "Herold" is rather unsuited.

#### Structure

Every special field is classified by syndromes. All important facts are represented practically and clearly arranged – starting from the definition, continuing with the pathogenesis, important differential diagnoses which have to be considered, up to the diagnosis and therapy. Beside a detailed table of contents and index, "Herold" also shows standard values, vaccination schedules and ICD 10-codes.

### Importance for the local university

Due to the topicality in diagnosis and therapy, "Herold" is absolutely recommendable. In our POL-courses (Problem Oriented Learning) in Dresden, "Herold" is the book to which we will always return. No other book is better suited for preparing for written and oral exams, unless you don't like its compact style.

### Price

The cover price is 47 EUR. (...) This is really an excellent cost-benefit ratio.

To sum up, there is hardly any other book offering so many facts so clearly represented. I can only recommend this book to every medical student. "Herold" will always be a good companion, and not just while studying.

### **Book Review "Herold Internal Medicine 2003" (anint.de)**

In medical bookstores, shelves are packed with textbooks trying to outdo each other in size, content and appearance. It seems to get more and more important to spice the new edition visually with a new outfit, but often only small details are changing in the content.

The results of these optical structure experiments are often overloaded with graphics and colourful pages, which – although nice to look at – in most cases just cost more money.

"Internal Medicine – a lecture-oriented presentation", nicknamed "The Herold", takes a different approach. Contrary to Microsoft's XP time spirit of colourful images, for decades it has been concentrating on the essentials of a textbook.

### The content

In 18 chapters the book contains all issues of internal medicine in a comprehensive and complete form. There is no unnecessary waffle, but exact facts are presented in clear sentences and key points.

In addition, "The Herold" often points out special problems, reference sites on the internet and the latest study results. The structure of the chapter content is very well understandable, despite the lack of colours and little pictures. The author Gerd Herold uses Bold, Underline and Grey Background as design tools, like we used to do with the good old tried and tested typewriter.

Herold's "Internal Medicine" is edited annually, and it is always up to date.

There are many cross-references to reference pages on the internet; new drugs are included as well as the recommendations of professional societies. Such topicality is rare amongst textbooks, however it is essential in day-to-day medical practice.

The third reason for the success story "Herold": The textbook ranges far below the average of comparable (content) textbooks, in which the price is now rapidly approaching €100. It is a textbook with an excellent price-performance ratio.

Bottom Line: "Internal Medicine" by Gerd Herold has got everything a textbook needs: No colourful outfit, no unnecessary pictures or graphics, but pure facts. The annual updating and the very moderate price make "The Herold" a first class textbook which has accompanied several generations of doctors.

### **Book Review of Internal Medicine: The Herold (springer.de/medizin-online.de)**

The "Herold" is recommended to all those who want quick and comprehensive information about any issue on internal medicine. This standard learning book offers concentrated information in a small size.

Talking about „The Herold“, usually every doctor or medical student knows what is meant by it. This handy textbook of the publisher Dr. Herold, MD, even fits into a white coat pocket. It provides concentrated information on internal medicine and also is a comprehensive reference.

19 chapters – each of them dedicated to the various disciplines of internal medicine – provide both basic information and new knowledge. Herold not only presents standard fields like cardiology and endocrinology, but also newer areas such as the somatoform disorders and bullying-induced diseases. Basic information on the individual diseases, but also specific information are clearly presented in a repetitive pattern. Annually, the book appears in an updated edition. Tips and advices for everyday clinical practice, easily understandable explanations of more complicated issues, and the ICD codes included in the text make this book a great asset to students and doctors alike.

With its modest appearance and lack of coloured figures, the book fully concentrates on its contents and at the same time, it is available at a low price.

Whether for the preparation for exams as a reference book or for everyday clinical practice, "Herold" satisfies all the demands a physician can make on a medical book.

### **Herold, the Magic Word of Internal Medicine (ciao.com)**

I have owned "Herold" for a longer period of time, and I must say the investment in a book has never paid off like this before.

It is really astonishing and hard to believe that the supreme discipline of medicine, Internal Medicine, should fit into such a small book.

But this is really the case and not at the expense of quality. Every subject is dealt with neatly, and everything important can be looked up, an ideal textbook for written tests, exams and everyday hospital work (e.g. during clinical internship or clerkship).

The book is written in a language easy to understand, and due to its small size, you can take it with you everywhere without rupturing yourself.

Again and again, you will find good pieces of advice and important remarks which can spare you some awkward situation during your daily hospital work. For this reason, this book can only be recommended to all students, as a kind of standard compulsory reading so to speak.

Informational content: Very instructive

Imparting of the subject: Very good

Required previous knowledge: Suited for laymen as well as for experts

Type of book: Jotter

*For more reviews take a look at [www.herold-immere-mezizin.de/rezensionen.htm](http://www.herold-immere-mezizin.de/rezensionen.htm)*

# HEROLD's INTERNAL MEDICINE

## SECOND EDITION

"Herold: Internal Medicine" is a lecture oriented representation taking account of the topic catalogue for the medical examination for physicians. It contains ICD-10 codes within the text and the index.

"Herold: Innere Medizin" by Gerd Herold (MD) is one of the leading textbooks of internal medicine in Germany, if not the leading one. Its enormous popularity is based on the facts that it represents the topics of internal medicine in an accurate and systematic form and that it has been updated every year since 1982. Because of its success, it has been translated into several languages. For several years, there has been a growing need for an English edition. This has finally been made possible, thanks to committed German and English physicians and certified translators.

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