

# Chronic Heart Failure: ¿IS IT A SYNDROME OR A DISEASE?

Dr. Nikolay Iabluchanski  
National University of Kharkov, Ukraine



Medicus Amicus

## This Happened a Long Time Ago...

**Dr. Bobrov, Director of the Institute of Cardiology of Strazhesko (Ukraine), in one cardiology conference (in times of the Soviet Union) reflected: "If the episode of rheumatic fever occurred more than 20 years ago, would it be appropriate to discuss now, this rheumatic fever in its nonactive (chronic) phase, mitral valve stenosis,..., or would it be more appropriate to discuss post-rheumatic mitral valve stenosis?"**

## This Happened Recently...

- **Professor Dr. Shved in his article “Rheumatic Fever: Myths and Reality” (Medicus Amicus, 2003, №5 ) wrote:**
- **For our science, rheumatic fever is a chronic disease with inflammatory character, which, after an acute presentation, “keeps burning” throughout the life of patients, and with its ongoing progress, causes valvular heart diseases, and other complications, causing disabilities and fatal consequences. Therefore, patients with history of rheumatic fever require permanent ambulatory follow up and management.”**

**According to the WHO recommendations, rheumatic fever is considered as an acute inflammatory disease, which may evolve into a patient’s total recovery or the development of rheumatic valvular heart diseases.**

## This Happened Recently...

- In year 2003, the National Kidney Foundation (NKF) from USA, proposed the term “chronic renal disease.” Its purpose was the following one: defining the term and stages of the “chronic renal disease” (CRD), that would not depend on the etiology of renal insufficiency, or on the choice of lab parameters (or methods); and that also, would be able to appropriately characterize the evolution of the CRD and determine the relationship between the degree of renal function impairment and complications; that could also help in the stratification of risk factors for the progression of chronic renal disease and the development of cardiovascular diseases.
- This initiative was supported by “Kidney Diseases: Improving Global Outcomes (KDIGO)”, in year 2005.
- In the international classification of diseases, ICD 10 (International Statistical Classification of Diseases and Related Health Problems), there is no CRD, since this classification was created before the conception of this term; however, in ICD-9-CM (October 1st, 2005), each stage of CRD is already encoded.



## Conclusion

- There are diseases that become the causes for new diseases.
- These new diseases are alterations in the main functions of affected organs, caused by the causing diseases (I apologize for the redundancy).
- There are paradigms and paradoxes.
- It is only natural for paradoxes to become paradigms.
- If there are heart failure-causing diseases (impairment of the main function of the heart), then, it is only logical to speak of a Chronic Cardiac Disease or Heart Failure as a disease, and not as a syndrome.



## What Do We Really Have?

Heart failure is a syndrome according to the ESC recommendations

- Heart failure is not a disease, but one of the clinical syndromes of cardiovascular diseases or from other systems, where the heart is involved (e.g. “cor pulmonale”).
- Heart failure can never be a diagnosis by itself, since in all cases it should be included within the structure of an etiologic diagnosis.



# What Do We Really Have?

Heart failure is a disease in the ICD 10

- OTHER CARDIAC DISEASES  
(I30-I52)
- I50 Heart failure
- I50.0 Congestive heart failure
- I50.1 LV insufficiency
- I50.9 Nonclarified heart failure



## Is It a Syndrome or a Disease?

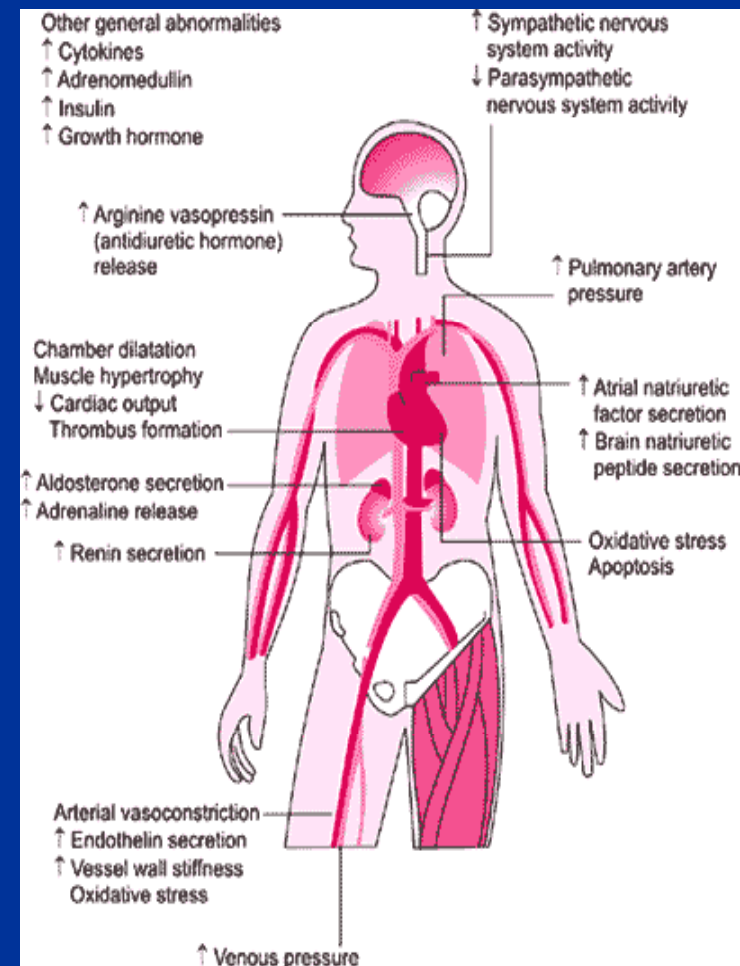
- HF is a complication from different diseases.
- Heart failure, within the causing disease, is a modification of the mechanisms and clinical symptoms of this disease.
- We can solve the problem of the causing disease, but the heart failure remains.
- Heart failure, as a consequence of other diseases, has its own mechanisms and clinical symptoms; then, *“residual” heart failure is a syndrome or a disease?*
- We live in a world of causes-consequences: a consequence (and only a consequence) is the cause of a new consequence.
- The hypothesis that heart failure is a disease, is already becoming important in the scientific world, and does not seem so unacceptable.



# A New Understanding of Heart Failure according to the ESC (1)



- The cause is the impairment of heart structure (*function and composition*).
- Union between local and systemic mechanisms.
- Key role of regulating systems.
- Regular therapeutic interventions.
- Targets of therapeutic interventions:
  - Renin-angiotensin-aldosterone system (RAAS).
  - Autonomic nervous system.



Practical Guidelines For the Management of Congestive Heart Failure

# A New Understanding of Heart Failure according to the ESC (2)



## Baseline management (*first step*):

- ACEI, in the case of adverse effects, angiotensin 2 receptor blockers (ARB).
- Beta-blockers, mainly, alpha-beta-blockers (carvedilol).
- Digoxin in low doses (homeopathic), as a neurohormonal modulator.
- Diuretics in the cases of edematous syndrome.

# A New Understanding of Heart Failure according to the ESC (3)



- A review of baseline treatment (*second step*): it focuses on *understanding regulating systems as a whole (as a regulating orchestra) and the need of systemic interventions on regulation*:
  - ACEI;
  - ARB;
  - *Aldosterone antagonists*;
  - Beta-blockers;
  - Digoxin in low doses;
  - Diuretics in the case of edematous syndrome.

# A New Understanding of Heart Failure according to the ESC (4)



- Asymptomatic HF -> ACEI (or ARB) + beta-blockers;
- Symptomatic HF -> ACEI (ARB) + BB + AA;
- Digoxin in low doses (decreases the cost of annual management of HF by a 40%). **Digoxin for everyone!**
- Diuretics in the case of edema (do not exaggerate!).

# A New Understanding of Heart Failure according to the ESC (5)



- Multidisciplinary approach (*social services, cardiologists, nutritionists, psychologists, physiotherapists, pharmacists, geriatricians, nurses, and others*);
- Ambulatory management (*outpatient clinic*);
- Changes in life style;
- Individual management (do not use standard plans for everyone);
- Prioritize neurohormonal management; consider the regulatory system as an indivisible orchestra;
- A decrease of clinical costs.

**Medicus Amicus**



# Chronic Heart Failure

(to prevent it from becoming a disease)

- In a certain stage of its evolution, HF starts displaying its “own” clinical signs and symptoms, and its management starts to play a dominant role, “pushing” the causing disease to the background;
- The aim of the treating physician is to recognize and prevent as soon as possible, the clinical manifestations of HF, to prevent it from reaching the level of disease;
- Maybe one day, “chronic heart disease” or “chronic heart failure” will also hold a place along with “chronic renal disease” ....