

## Heart Disease New Hypotesys: Under Endogenous Toxicological Aspect

Luisetto M<sup>1</sup>, Behzad Nili-Ahmadabadi<sup>2</sup> and Ghulam Rasool Mashori<sup>3</sup><sup>1</sup>Applied pharmacologist, independent researcher Italy.<sup>2</sup>Pharm D/PhD innovative Pharmaceutical product development specialist, USA.<sup>3</sup>Department of Medical & Health Sciences for Woman, Peoples University of Medical and Health Sciences for Women, Pakistan.**\*Correspondence:**

Luisetto M, Applied pharmacologist, independent researcher Italy, E-mail: mauro65@gmail.com.

**Received:** 28 December 2017; **Accepted:** 24 January 2018**Citation:** Luisetto M, Behzad Nili-Ahmadabadi, Ghulam Rasool Mashori. Heart Disease New Hypotesys: Under Endogenous Toxicological Aspect. *Cardiol Vasc Res.* 2018; 2(1); 1-2.**Keywords**

Cardiology research, Cardiovascular pathology, Toxicology, Gradients, Innovative therapeutic strategies.

**Introduction**

In order to suggest new pathogenetic hypotesysin some heart disease we think is interesting to observe some biomedical literature: Can we think some endogenous toxicologic movens in some heart pathologies?

We start our paper observing that in past centuries physicians in some cardiologic disease were used to prescribe to the patient to take a long rest in order to recuperate their health status. In past centuries it wasn't available high efficient drugs strategies and so to take a long rest without physical and psychological stress contributes to this process.

Also in oriental medicine we can see body balances strategies, and also in some psyco analitic techniques we can see that time is relevant to re-equilibrate some conditions (in example acute stress). We can think that the main factors involved are TIME and LONG REST in order to balance the physiologic functions. In some case it was observed complete resolve in some situations. In example we can think that a metabolic unbalances can create this situation and the time make possible to restore.

In example what happen in sudden death heart syndrome in untrained? [1] Why in this condition physical training can reduce this event? We can think a condition of intra- toxicity time related [1].

In example what happen in sudden death heart syndrome in untrained? [1] Why in this condition physical training can reduce this event? We can think a condition of intra- toxicity time related.

We think in this condition is relevant observe the time related intra-toxicity situation involved in some Metabolic- catabolic- electrical cell membrane - immune status and other. In example involved in some heart aritmia, epileptic status, septic shock and other situation high time related (ischemic coronaric spasm etc). In embryology, oncology, toxicology, some heart and brain pathologies time is relevant added to local micro environment and inters cellular communication (crisis). We can consider an intra- local toxicology aspect time related to better verify some pathologic process under a new light [1].

Katritsis et al. write that CAD is the predominant cause of SCD in older athletes. Vigorous exertion can trigger cardiac arrest or SCD, especially in untrained persons, but habitual vigorous exercise diminishes the risk of sudden death during vigorous exertion [2].

According the recent paper "Brain and Transmission Signal Modulation" 2017. As observed in other scientific or medical discipline controlling some non-physiological cellular activity Results in reducing of abnormal organ activation [3].

There is a circadian variation in SCD. The peak incidence of SCD occurs between 6 am and noon (and is blunted by beta-blockers), with a smaller peak occurring in the late afternoon for out-of-hospital VF arrests. The incidence is highest on Mondays.

In the young (<35 years), the most common cause of SCD is arrhythmia, mostly in the context of an apparently normal heart. The most common causes of SCD are congenital abnormalities in those aged 0-13 years, primary arrhythmia in the 14-24-year age group, and CAD in those >25 years. In 5-20% of cases no significant cardiac abnormality is found at autopsy. In a recent Danish registry report on individuals aged <50 years, sudden death was caused by non-cardiac diseases, such as pulmonary embolism,

meningitis and cerebrovascular bleeding, in 28% of cases [4].

According to Hung et al. Coronary artery spasm (CAS), an intense vasoconstriction of coronary arteries that causes total or subtotal vessel occlusion, plays an important role in myocardial ischemic syndromes including stable and unstable angina, acute myocardial infarction, and sudden cardiac death. Coronary angiography and provocative testing usually is required to establish a definitive diagnosis. While the mechanisms underlying the development of CAS are still poorly understood [5].

CAS appears to be a multifactorial disease but is not associated with the traditional risk factors for coronary artery disease. The diagnosis of CAS has important therapeutic implications, as calcium antagonists, not  $\beta$ -blockers, are the cornerstone of medical treatment. The prognosis is generally considered benign; however, recurrent episodes of angina are frequently observed. We provide a review of the literature and summarize the current state of knowledge regarding the pathogenesis of CAS [5-9].

### Discussion & Conclusion

- Can we think some endogenous toxicologic movens in some heart pathologies?
- Mathabolic- catabolic Kinetics is relevant factor in balancing some cellular- tissue responses?
- Some endogenous gradients time related can be responsible in some organ failure?
- In toxicology field usually are high considered the external environmental factors as iatrogenic substantia but we think we must observe under toxicological methods also the endogenous intra-extra cellular local microenvironment (in paraphysiologic-pathologic situations).
- In some cardio vascular pathology the time is relevant added to endogenous local micro environment and inters cellular communication status. We must consider an endogenous intra-local toxicology aspect time related to better verify some pathologic process under a new light.
- In some time related cardiovascular local metabolic-catabolic-toxic status we can observe some cellular effect resulting in

global organ failure.

- The time involved and kinetics aspect in resolve some temporary methabolic- catabolic gradients or the velocity involved in this process can be fundamental.
- The same effect related to too much rapid evolution or too slow reduction (kinetics) in balancing equilibrates some physiologic systems.
- (In example the reduced effect showed in sports trained in SCD vs not trained, activate platelets in trigger coronary artery spasms or other relevant examples).
- Need we to introduce more toxicological methods in some pathologies in order to BETTER clear some relevant aspect in etiology, diagnosis and therapy?

### References

1. Luisetto M. Intra- Local Toxicology Aspect Time Related in Some Pathologic Conditions. *Open Acc J of Toxicol.* 2017; 2: 555586.
2. Katritsis DG, Gersh BJ, Camm AJ. A Clinical Perspective on Sudden Cardiac Death. *Arrhythm Electrophysiol Rev.* 2016; 5: 177-182.
3. Luisetto M. Short communication Brain and Transmission Signal Modulation theramostic brain disorder. 2017.
4. Luisetto M, Luca C, Farhan A K, et al. Sudden Heart Pathology-a New Research Hipotesys. *J Cardiol & Cardiovasc Ther.* 2017; 8: 555730.
5. Hung MJ, Hu P, Hung MY. Coronary artery spasm: review and update. *Int J Med Sci.* 2017; 11: 1161-1171.
6. Luisetto M, Nili-Ahmadabadi Bm, Mashori GR. PBSIJ Mindset Kinetics–Under Toxicological Aspect. *Psychology and Behavioral Science.* 2018.
7. Myerburg RJ, Junttila MJ. Sudden cardiac death caused by coronary heart disease. *Circulation.* 2012; 125: 1043-1052.
8. Sörös P, Hachinski V. Cardiovascular and neurological causes of sudden death after ischaemic stroke. *Lancet Neurol.* 2012; 11: 179-188.
9. Luisetto M, Nili-Ahmadabadi Bm, Mashori GR. Surgery and new Pharmacological strategy in some atherosclerotic chronic and acute conditions. *Arch Surg Clin Res.* 2017; 1: 042-048.