

Communication of novel concepts

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Submitted Feb 3, 2012. Accepted for publication Feb 5, 2012.

DOI: 10.3978/j.issn.2223-3652.2012.02.05

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We are proud to present the second print-issue of the journal 'Cardiovascular Diagnosis and Therapy' (CDT), which is also available on a open-access basis at the journal website www.thecdt.org. The current issue includes a variety of articles, including original data, review articles, and clinical perspectives. The on-line version includes selected content in Chinese (Mandarin).

As we described previously (<http://www.thecdt.org/article/view/38>), one of the important goals of this new journal is the rapid distribution of peer-reviewed scientific material and perspectives about cardiovascular disease, using conventional and novel electronic media. While a fast submission, peer-review, editorial decision, proof-editing, and publishing process is important for any scientific data, it is particular critical in the scientific discussion of novel concepts.

Novel concepts in medicine and science in general are typically derived from a small number of experiments or small patient populations. Subsequent validation requires vigorous peer-review, scientific discussion, reproduction in independent laboratories world-wide in larger populations, and eventually in randomized, blinded trials.

Communication of the initial results is important, but may face obstacles, as the preliminary data are often limited by small, non-representative patient population, lack of statistical power, and other methodological limitations.

In this issue of the journal we include several manuscripts, which fit in this category, including:

- An original paper by Dr. Luca Saba *et al.* entitled: **"Intima Media Thickness Variability (IMTV) and its association with cerebrovascular events: a novel marker of carotid atherosclerosis?"** describes a novel methodological approach on how to analyze carotid intimal thickness using a dedicated software (1). As described in

the accompanying editorial by Bots *et al.* (2), the data is interesting, but derived from a small patient population, and most importantly does not include clinical endpoints, which will require further studies.

- A review paper by Ozkan, entitled: **"Low Gradient 'Severe' Aortic Stenosis with Preserved Left Ventricular Ejection Fraction"** (3) and a related editorial by Lancellotti (4) describe the important concept of paradoxical low-flow and/or low-gradient, severe AS, which appears to identify patients at a more advanced stage of the disease process with poor prognosis. This concept has recently gained interest in the context of TAVI (Transcatheter Aortic Valve Implantation) (5).

- A brief report by Hellings *et al.* describes the 10-year experience from an atherosclerosis biobank of carotid atherosclerotic plaque obtained at the time of endarterectomy (6). As evidenced by the long list of publications, this dataset has already provided important novel insights into progression of atherosclerotic disease. Ying Li *et al.* review recent data about Angiotensin II Type-2 Receptor-specific effects on the cardiovascular system (7).

These articles define medical innovation based on technological or experimental advances. However, there are other ways of innovation in the treatment of cardiovascular disease, in particular on a global perspective. Examples are documented in a recent publications from the humanitarian group MSF (Medcines Sans Frontieres), which describes that innovation in the context of humanitarian situations can be less spectacular but may have very significant impact on large populations in need (8).

This issue includes a Clinical Perspective paper by Ana Mocumbi entitled **"Lack of Focus on cardiovascular disease in sub-Saharan Africa"**, which describes the current status of cardiovascular research and care in that

region, but also ways for improvement (9). In previous published work, Dr. Mocumbi has demonstrated that echocardiographic screening for cardiovascular disease can have significant clinical impact (10,11). In the current Perspective Dr. Mocumbi points out that the integration of medical care for *non-communicable* disease and specifically cardiovascular disease with the current efforts for control of endemic infectious diseases in sub-Saharan Africa will advance research and medical care. This novel concept has recently been the topic of a recent high-level meeting of the General Assembly of the United Nations centered on non-communicable diseases (12).

Features in the journal *Cardiovascular Diagnosis and Therapy*, including ‘**Rapid Communication of Novel Concepts**’, are designed to provide a platform for the communication of such novel ideas. Fast on-line publication, distribution and feedback tools on the central web-site will allow initial communication, discussion, and potential cooperation between investigators.

Furthermore, we are excited to continue our ‘Art-in-Medicine’ series. In the current issue we highlight the work of a contemporary artist, Artemis Herber, from Baltimore (13). Our cover shows her work ‘Rusty Shelter’ and her submission includes additional paintings entitled ‘Power Plant’ and ‘Windmill’.

We wish that this and future issues of the journal will contribute to the distribution of novel concepts and different aspects of innovation in the field of cardiovascular disease worldwide.

Acknowledgements

Disclosure: The authors declare no conflict of interest.

References

1. Saba L, Mallarini G, Sanfilippo R, et al. Intima Media Thickness Variability (IMTV) and its association with cerebrovascular events: a novel marker of carotid atherosclerosis? *Cardiovasc Diagn Ther* 2012;2:10-8.
2. Bots ML, den Ruijter HM. Variability in the intima-media thickness measurement as marker for cardiovascular risk? Not quite settled yet. *Cardiovasc Diagn Ther* 2012;2:3-5.
3. Ozkan A. Low gradient “severe” aortic stenosis with preserved left ventricular ejection fraction. *Cardiovasc Diagn Ther* 2012;2:19-27.
4. Lancellotti P. Grading Aortic Stenosis Severity. When the Flow Modifies the Gradient-Valve Area Correlation. *Cardiovasc Diagn Ther* 2012;2:6-9.
5. Schoenhagen P, Hausleiter J, Achenbach S, et al. Computed Tomography in the Evaluation for Transcatheter Aortic Valve Implantation (TAVI). *Cardiovasc Diagn Ther* 2011 2011;1:44-56. Available online: <http://www.thecd.org/article/view/20>
6. Hellings WE, Moll FL, De Kleijn DPV, et al. 10-year experience with the Athero-Express study. *Cardiovasc Diagn Ther* 2012;2:63-73.
7. Ying Li, Xiao-hui Li, Hong Yuan. Angiotensin II Type-2 Receptor-specific Effects on the Cardiovascular System. *Cardiovasc Diagn Ther* 2012;2:56-62.
8. Jean-Hervé Bradol, Claudine Vidal. Medical Innovations in Humanitarian Situations: The Work of Médecins Sans Frontières. ISBN-10: 1461105951; ISBN-13: 978-1461105954. [Epub ahead of print]. Available online: <http://www.doctorswithoutborders.org/publications/book/medicalinnovations/?id=5268&cat=medical-innovations>
9. Mocumbi AO. Lack of focus on cardiovascular disease in sub-Saharan Africa. *Cardiovasc Diagn Ther* 2012;2:74-7.
10. Mocumbi AO, Ferreira MB, Sidi D, et al. A population study of endomyocardial fibrosis in a rural area of Mozambique. *N Engl J Med* 2008;359:43-9.
11. Marijon E, Celermajer DS, Tafflet M, et al. Rheumatic heart disease screening by echocardiography: the inadequacy of World Health Organization criteria for optimizing the diagnosis of subclinical disease. *Circulation* 2009;120:663-8.
12. General Assembly of the United Nations: High-level meeting noncommunicable diseases. [Epub ahead of print]. Available online: <http://www.un.org/en/ga/president/65/issues/ncdiseases.shtml>
13. Herber A. Rusty Shelter. *Cardiovasc Diagn Ther* 2012;2:80-2.

Cite this article as: Schoenhagen P. Communication of novel concepts. *Cardiovasc Diagn Ther* 2012;2(1):1-2. DOI: 10.3978/j.issn.2223-3652.2012.02.05