

Management of metabolic syndrome, a cookbook no longer

Jennifer Bean, PharmD, BCPS

Clinical Pharmacy Specialist, Mental Health Services
VA-Tennessee Valley Healthcare System
Assistant Professor
University of Tennessee, College of Pharmacy

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The Third Report of the Expert Panel on Detection, Evaluation, and Treatment of High Blood Cholesterol in Adults (Adult Treatment Panel III) and the Seventh Report of the Joint National Committee on Prevention, Detection, Evaluation, and Treatment of High Blood Pressure (JNC 7) were published in September 2002 (with update in 2004) and December 2003 respectively.^{1,2} Over the past three years clinicians have been anxiously awaiting the update of these guidelines; however, we are still waiting.

The JNC 8 is expected to be released at some point in 2012 according to the National Heart Lung and Blood Institute (NHLBI) website. These updated guidelines are planned to be released in conjunction with the ATP IV and Obesity 2 guidelines. Subsequently, the NHLBI plans to release an integrated cardiovascular risk reduction guideline. NHLBI is focusing on 5 topic areas with these updates: hypertension, high cholesterol, overweight/obesity, life style and risk assessment.³

At the CPNP annual meeting, Dr. Tovar discussed what we may expect from JNC 8 and ATP IV, and presented key literature that has been published since JNC 7 and ATP III were released. JNC 7 and ATP III tended to be algorithmic in how to treat patients, i.e., cookbook medicine. It is believed with JNC 8 and ATP IV that they will not be as "cookbook-like" as the previous guidelines. Essentially, these guidelines will encourage more individualization to the patient.⁴ This will require implementation of a thought process when assessing and evaluating patients. It will require that clinicians consider other factors that may modify clinical treatment instead just treating the blood pressure (BP) or hyperlipidemia (HLD). Dr. Tovar listed several factors for consideration when treating patients including host factors (allergy history, pregnancy, age, organ dysfunction and adherence), disease factors (severity and goals of therapy) and drug factors (drug interactions, efficacy, toxicity, cost, and simplicity of use).

When dealing with a psychiatric patient adherence and compliance are essential. Therefore, it is imperative that we factor pill burden, dosing frequency, and medication side-effects of a patient's co-morbidities into the equation when choosing therapy to treat co-morbid metabolic issues. Clinicians must get past treating to a number and treat the patient. So that brings up, what can we expect from the JNC 8 and ATP IV?

The real question is, what are they going to ask (and then attempt to answer)? Does starting pharmacologic therapy at specific BP thresholds improve health outcomes? Does treatment with antihypertensive pharmacological therapy to a specified BP goal lead to improvements in health outcomes? Do various antihypertensive drugs or drug classes differ in comparative benefits and harms on specific health outcomes? What evidence supports LDL-c goals for primary and secondary prevention? What is the impact of the major cholesterol drugs on efficacy and safety? Essentially, whether we are talking hypertension, hyperlipidemia or diabetes, the question becomes how low is too low?

The answer to these questions will be individualized based on multiple patient factors. Is the patient newly diagnosed? How old are they? What other co-morbidities do they have such as diabetes, coronary vascular disease, chronic kidney disease, etc.? You get the picture. So we will keep waiting for the new guidelines decide to come out. Until that time, you will be able to review Dr. Tovar's session by the end of June in CPNP University. We also recommend reading an article by Ismail-Beigi, et al, entitled *Individualizing Glycemic Targets in Type 2 Diabetes Mellitus: Implications of Recent Clinical Trials* Ann Intern Med. 2011; 154:554-559.⁵

REFERENCES

1. The Seventh Report of the Joint National Committee on Prevention, Detection, Evaluation, and Treatment of High Blood Pressure (JNC 7). National Heart Lung and Blood Institute website. Available at: <http://www.nhlbi.nih.gov/guidelines/hypertension/>. Accessed April 19, 2012.

2. Third Report of the Expert Panel on Detection, Evaluation, and Treatment of High Blood Cholesterol in Adults (Adult Treatment Panel III). National Heart Lung and Blood Institute website. Available at: <http://www.nhlbi.nih.gov/guidelines/cholesterol/index.htm>. Accessed April 19, 2012
3. Cardiovascular Risk Reduction Guidelines in Adults: Cholesterol Guideline Update (ATP IV), Hypertension Guideline Update (JNC 8), Obesity Guideline Update (Obesity 2), Integrated Cardiovascular Risk Reduction Guideline. National Heart Lung and Blood Institute website. Available at: http://www.nhlbi.nih.gov/guidelines/cvd_adult/background.htm. Accessed April 20, 2012.
4. Tovar, JM. Metabolic Syndrome and the Psychiatric Patient: A Review of the Newly Released Guidelines. Presented at College of Psychiatric and Neurologic Pharmacists Annual Meeting May 1, 2012.
5. Ismail-Beigi F, Moghissi E, Tiktin M, Hirsch IB, Inzucchi SE, Genuth S. Individualizing glycemic targets in type 2 diabetes mellitus: implications of recent clinical trials. *Ann Intern Med.* 2011;154(8):554-9. DOI: [10.7326/0003-4819-154-8-201104190-00007](https://doi.org/10.7326/0003-4819-154-8-201104190-00007). PubMed PMID: [21502652](https://pubmed.ncbi.nlm.nih.gov/21502652/).

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