

## Pheochromocytoma

(NOVEMBER 2014)

**TO THE EDITOR:** I read with avid interest the IM Board Review by Pagán et al on a man with pheochromocytoma.<sup>1</sup> The article stated that the classic triad is headache, hypertension, and hyperglycemia. I found this to be incorrect. And *Harrison's Principles of Internal Medicine*<sup>2</sup> states that the classic triad is palpitations, headaches, and profuse sweating. I hope you will clarify this in the interest of the readers as it is a board review article.

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1. Pagán RJ, Kurklinsky AK, Chirila R. A 61-year-old man with fluctuating hypertension. *Cleve Clin J Med* 2014; 81:677–682.
2. Neumann HH. Chapter 343. Pheochromocytoma. In: Longo DL, Fauci AS, Kasper DL, Hauser SL, Jameson J, Loscalzo J, editors. *Harrison's Principles of Internal Medicine*, 18th edition. New York, NY: McGraw-Hill, 2012. <http://0-accessmedicine.mhmedical.com/library/ccf.org/content.aspx?bookid=331&Sectionid=40727148>. Accessed March 12, 2015.

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**IN REPLY:** Thanks to Dr. Belur for his observation. He is correct in that the classic triad includes headaches, palpitations, and diaphoresis, although hypertension and hyperglycemia have been described in the literature as frequently occurring, and the clinical presentation can be extremely variable.

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## Pulmonary tuberculosis

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**TO THE EDITOR:** The article by Dr. Catherine Curley,<sup>1</sup> “Rule out pulmonary tuberculosis: clinical and radiographic clues for the internist,” was very well written, but we would like to point out two facts regarding the diagnosis of pulmonary tuberculosis, especially in high-prevalence countries like India, that might make the article more informative.

First, it has been shown conclusively that good-quality microscopy of two consecutive sputum specimens identifies the majority (95%–98%) of smear-positive tuberculosis patients. The World Health Organization (WHO) therefore revised its policy on case detection by microscopy<sup>2</sup> in 2007 to recommend a reduction in the number of specimens examined, from three to two in settings with appropriate external quality assurance and documented good-quality microscopy. This approach greatly reduces the workload of laboratories, a considerable advantage in countries with a high proportion of smear-negative tuberculosis patients because of human immunodeficiency virus (HIV), extrapulmonary disease, or both.

Moreover, in 2011, the WHO recommended in a policy statement that countries that have implemented the current WHO policy for two-specimen case-finding consider switching to same-day diagnosis, especially in settings where patients are likely to default from the diagnostic pathway.<sup>3</sup>

Second, regarding the interferon-gamma-release assay, the 2011 WHO policy stated that there are not only insufficient data and low-quality evidence on the performance of this assay in low- and middle-income countries, typically those with a high tuberculosis and HIV burden, but also that the interferon-gamma-release assay and the tuberculin skin test cannot accurately predict the risk of infected individuals developing active tuberculosis. Moreover, neither the assay nor the skin test should be used for the diagnosis of active tuberculosis disease. The interferon-gamma-release assay is more costly and technically complex than the skin

test. Given comparable performance but the increased cost, replacing the skin test with the interferon-gamma-release assay is not recommended as a public health intervention in resource-constrained settings.<sup>4</sup> The majority of tuberculosis cases (on average 85.8%) were detected with the first sputum specimen. With the second sputum specimen, the average incremental yield was 11.9%, while the incremental yield of the third specimen, when the first two specimens were negative, was 3.1%.<sup>5</sup>

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**IN REPLY:** Thank you for your interesting and appropriate comments. The workup and testing of patients with suspected tuberculosis is clearly different in countries with a higher prevalence of tuberculosis than in countries with a lower prevalence. I appreciate that both the purified protein derivative and the interferon-gamma-release assay have very limited utility in the evaluation for active tuberculosis when there is a very high background prevalence of latent tuberculosis infection. In low-prevalence countries like the United States, tuberculosis is often considered in the differential diagnosis even when other infections or lung cancer is more likely. The tests for latent tuberculosis are considered quite important in the workup of active tuberculosis in this setting.

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#### REFERENCES

1. **Curley CA.** Rule out pulmonary tuberculosis: clinical and radiographic clues for the internist. *Cleve Clin J Med* 2015; 82:32–38.
2. **World Health Organization.** TB diagnostics and laboratory strengthening—WHO policy. Reduction of number of smears for the diagnosis of pulmonary TB, 2007. [www.who.int/tb/laboratory/policy\\_diagnosis\\_pulmonary\\_tb/en/](http://www.who.int/tb/laboratory/policy_diagnosis_pulmonary_tb/en/). Accessed March 12, 2015.
3. **World Health Organization.** Same-day diagnosis of tuberculosis by microscopy. WHO policy statement. [www.who.int/tb/publications/2011/tb\\_microscopy\\_9789241501606/en/](http://www.who.int/tb/publications/2011/tb_microscopy_9789241501606/en/). Accessed March 12, 2015.
4. **World Health Organization.** Use of tuberculosis interferon-gamma release assays (IGRAs) in low- and middle income countries. Policy statement. [http://apps.who.int/iris/bitstream/10665/44759/1/9789241502672\\_eng.pdf?ua=1](http://apps.who.int/iris/bitstream/10665/44759/1/9789241502672_eng.pdf?ua=1). Accessed March 12, 2015.
5. **Mase S, Ramsay A, Ng N, et al.** Yield of serial sputum specimen examinations in the diagnosis of pulmonary tuberculosis: a systematic review. *Int J Tuberc Lung Dis* 2007; 11:485–495.

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