

Editors' Note: Dr. Santulli, citing the findings of Dr. Mishra et al. that neither diabetes nor prior stroke affected thrombolysis outcomes, calls for the reevaluation of thrombolysis criteria and the adoption of a clinical score, similar to that used in acute coronary syndrome, to stratify risk. There were 2 WriteClick submissions in reference to the recent article by Dr. Stein et al. comparing high-dose and low-dose vitamin D2 supplementation in relapsing-remitting multiple sclerosis. Dr. Leitner calls attention to the incongruity of epidemiologic trends in MS vs another vitamin D–related illness, rickets, as further reason not to supplement patients with MS without proven vitamin D deficiency at this time. Dr. Grimaldi et al. argue that the study was underpowered and potentially biased. Their own phase II study of high-dose vitamin D3 supplementation is under way.

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THROMBOLYSIS OUTCOMES IN ACUTE ISCHEMIC STROKE PATIENTS WITH PRIOR STROKE AND DIABETES MELLITUS

Gaetano Santulli, New York: Mishra et al.¹ examined the influence of diabetes mellitus and prior stroke on the outcomes of patients who received thrombolysis vs nonthrombolized controls. They found no interaction on outcome between diabetes and prior stroke with thrombolysis treatment.

These results conflict with the European Medicines Evaluation Agency's justification for restricting the use of IV alteplase. As Dr. Demaerschalk mentioned in the accompanying editorial,² recent studies^{1,3,4} have suggested that thrombolysis can be safely used in several groups of patients who do not qualify for treatment due to strict application of exclusion criteria.

In addition, most of the commonly cited thrombolytic exclusion criteria are just consensus-based, not evidence-based.^{2,3} It is time to reevaluate the criteria for thrombolysis, adopting a clinical score to stratify the risk, similar to those used in acute coronary syndrome.⁵ A good risk assessment tool will be able to identify a gradient of mortality risk by using variables that capture the majority of prognostic information to better evaluate the risk/benefit ratio for each patient.

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1. Mishra NK, Ahmed N, Davalos A, et al. Thrombolysis outcomes in acute ischemic stroke patients with prior stroke and diabetes mellitus. *Neurology* 2011;77:1866–1872.
2. Demaerschalk BM. Challenging the validity of imposing contraindications to thrombolysis for acute ischemic stroke. *Neurology* 2011;77:1862–1863.
3. Tong D. Are all IV thrombolysis exclusion criteria necessary? Being SMART about evidence-based medicine. *Neurology* 2011;76:1780–1781.
4. Rubiera M, Ribo M, Santamarina E, et al. Is it time to reassess the SITS-MOST criteria for thrombolysis? A comparison of patients with and without SITS-MOST exclusion criteria. *Stroke* 2009;40:2568–2571.
5. Morrow DA, Antman EM, Charlesworth A, et al. TIMI risk score for ST-elevation myocardial infarction: a convenient, bedside, clinical score for risk assessment at presentation: an intravenous nPA for treatment of infarcting myocardium early II trial substudy. *Circulation* 2000;102:2031–2037.

A RANDOMIZED TRIAL OF HIGH-DOSE VITAMIN D2 IN RELAPSING-REMITTING MULTIPLE SCLEROSIS

Helmut H. Leitner, Vienna: Stein et al.¹ compared high- vs low-dose vitamin D2 treatment in MS without benefit in the high-dose treatment group. Sunlight exposure and reduced vitamin D3 levels independently contribute to MS risk. The effect of sunlight exposure is supported by decreased signs of actinic skin damage found in MS patients compared to controls.² It is difficult to determine which of these 2 environmental factors is of primary importance as higher levels of sunlight exposure will enhance vitamin D levels.

The incidence of vitamin D–related rickets disease decreased in the United States and Europe during the last century following the discovery that vitamin D possessed antirachitic properties, whereas the incidence of MS seemed to increase in the same population. In the United States, most of the patients with rickets are African American, whereas the majority of patients with MS are of European ancestry.³ It seems improbable that the same environmental factor should be centrally involved in the etiology of both diseases, which differ clinically and occur in different populations living in the same geographic area.

These findings together with those of Stein et al. do not provide a reason for vitamin D supplementa-

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