Several reports showed that the nondipping status of a fall in nocturnal blood pressure (BP) is an independent risk factor for silent and clinically overt cardiovascular disease, but it is unclear whether nondipping is a cause or a consequence of target organ damage. In this issue of the *American Journal of Hypertension*, Pistrosch et al describe an interesting cross-sectional study of the association between diurnal variation of BP and that of blood glucose in hypertensive patients with Type 2 diabetes. Diabetic nondippers exhibited a higher postprandial glucose excursion than did dippers, whereas the levels of fasting glucose and glycohemoglobin were comparable between the two groups. Nondippers also had a higher excretion of urinary albumin than did dippers. Because the postprandial excursion was reported to be an independent risk factor for cardiovascular events, the finding of Pistrosch et al is in accordance with a previous clinical observation that diabetic nondippers have a poorer cardiovascular prognosis. The association between diurnal variation of BP and postprandial glucose should be confirmed in nonmedicated diabetic patients in earlier stages. As shown in their Fig. 1, not only the postprandial glucose level, but also the preprandial glucose level, remains higher in nondippers than in dippers. In addition, nondippers tend to exhibit a higher level of glycohemoglobin than do dippers, although the difference between the two groups did not reach statistical significance. Thus, diabetic nondippers in this study may have had more advanced target organ damage because of poorly controlled glucose than did dippers. Antihypertensive and antidiabetic medications would affect the dipping status in nocturnal BP and the diurnal variation in glucose. The future study using a glucose tolerance test to detect the postprandial peak of glucose in patients with impaired glucose tolerance or with mild diabetes mellitus seems to be interesting to detect the association with dipping status in nocturnal BP.

**References**


