

## **Diabetes and Depression Can Be a Lethal Combination**

The study is published in the last October issue of the *Journal of General Internal Medicine*.

It stated that combination of diabetes and depression in the elderly population is linked to higher all-cause mortality vs. diabetes alone.

In a prospective 2-year follow-up study, investigators at the University of Washington in Seattle found that individuals older than 65 years with both diabetes and depression had approximately a 38% increased risk for all-cause mortality vs. their counterparts who had diabetes but who were not depressed.

Actually, the result of this study was explained by the fact that in diabetes, there is poor adherence to self-care regimens including glucose monitoring, diet, exercise, and taking medication as prescribed. Furthermore, individuals with depression are more likely to smoke, be overweight, and have a sedentary lifestyle. In addition, studies show that only 50% to 60% of patients with diabetes who have co-morbid depression are accurately diagnosed, and of these, only 25% receive effective treatment.

The American Diabetes Association and, most recently, the American Heart Association, both recommend depression screening in their respective constituents with diabetes and coronary heart disease.

*J Gen Intern Med.* 2008;23:1571-1575.

## **Eating Until Full and Eating Quickly May Triple the Risk for Overweight**

A combination of eating until full and eating quickly may increase the risk for overweight by 3-fold, according to the results of a cross-sectional survey reported in the last October in the *BMJ*.

The goal of this study was to evaluate whether eating until full or eating quickly or combinations of these eating behaviors were linked to overweight.

From 2003 to 2006 in 2 communities in Japan, 3287 adults (1122 men, 2165 women) aged 30 to 69 years participated in surveys on cardiovascular risk. Factors surveyed included overweight status, defined as a body mass index of 25.0 kg/m<sup>2</sup> or more, and dietary habits of eating until full as measured with a lifestyle questionnaire and speed of eating as measured with a validated brief self-administered questionnaire.

More than half of the men (50.9%) and women (58.4%) surveyed self-reported eating until full. Eating quickly was self-reported by 45.6% of the men and 36.3% of the women. Compared with the group of participants of both sexes who reported not eating until full and not eating quickly, the group who reported eating until full and eating quickly had the highest age-adjusted mean values for height, weight, body mass index, and total energy intake.

Eating quickly and gorging, have been associated with insulin resistance. All these eating behaviors may lead to being overweight or obese. In addition, the positive association of eating quickly with body mass index was observed independent of total energy intake.

*BMJ.* Published online October 22, 2008.

## Doctor, You could Now Measure Abdominal Height

There's good news for busy practitioners -- you can throw away those time-consuming BMI calculators and inconvenient tape measures -- we have a better way of estimating cardiovascular disease (CVD) risk: the simple ruler!

Yes, abdominal height (AH) measured as the distance from the exam table to the top of the belly when the patient is lying supine, has been shown in many studies to be a better predictor of cardiovascular disease than any other anthropometric measurement including BMI [body mass index], waist circumference, waist-hip ratio (WHR), and skin-fold thickness.<sup>[1-6]</sup> Abdominal height also better correlates with an adverse metabolic profile including low HDL [high-density lipoprotein] and increased triglycerides, blood pressure, inflammatory cytokines, renal sodium reabsorption, blood glucose, and insulin resistance.<sup>[7-10]</sup> Abdominal height has also been associated with impotence, liver function abnormalities, and impaired pulmonary function.<sup>[11-14]</sup>

Abdominal height predicts cardiovascular disease risk because it is an excellent measure of visceral adiposity or intra-abdominal fat, which is associated with insulin resistance. Other anthropometric measurements are less specific for visceral adiposity since they include subcutaneous fat. Visceral fat drains through the portal circulation and bathes the liver with high levels of free fatty acids. These fatty acids can accumulate in the liver, leading to a fatty liver and abnormalities in insulin action and lipid synthesis.

It is fast, simple, reliable<sup>[15]</sup> and a better predictor of cardiovascular disease than either BMI or waist-hip ratio. One major obstacle is the lack of reference ranges and cutpoints to assign risk categories. Another may be the embarrassment of telling a patient their beer belly is too big.

So remember, when your patient's belly enters your office before they do, think about getting out that ruler and measuring abdominal height. Unfortunately, for many of my patients that ruler will have to be a yardstick.

That's my opinion. I'm Dr George Griffing, Professor of Medicine at St Louis University and Editor in Chief for Internal Medicine of eMedicine

### References

1. Kahn HS, Simoes EJ, Koponen M, Hanzlick R. The abdominal diameter index and sudden coronary death in men. *Am J Cardiol.* 1996;78:961-964.
2. Empana JP, Ducimetiere P, Charles MA, Jouven X. Sagittal abdominal diameter and risk of sudden death in asymptomatic middle-aged men: the Paris Prospective Study I. *Circulation.* 2004;110:2781-2785.
3. Gustat J, Elkasabany A, Srinivasan S, Berenson GS. Relation of abdominal height to cardiovascular risk factors in young adults: the Bogalusa heart study. *Am J Epidemiol.* 2000;151:885-891.
4. Ohrvall M, Berglund L, Vessby B. Sagittal abdominal diameter compared with other anthropometric measurements in relation to cardiovascular risk. *Int J Obes Relat Metab Disord.* 2000;24:497-501.

5. Iribarren C, Darbinian JA, Lo JC, Fireman BH, Go AS. Value of the sagittal abdominal diameter in coronary heart disease risk assessment: cohort study in a large, multiethnic population. *Am J Epidemiol.* 2006;164:1150-1159.
6. Smith DA, Ness EM, Herbert R, et al. Abdominal diameter index: a more powerful anthropometric measure for prevalent coronary heart disease risk in adult males. *Diabetes Obes Metab.* 2005;7:370-380.
7. Petersson H, Daryani A, Riserus U. Sagittal abdominal diameter as a marker of inflammation and insulin resistance among immigrant women from the Middle East and native Swedish women: a cross-sectional study. *Cardiovasc Diabetol.* 2007;6:10.
8. Strazzullo P, Barba G, Cappuccio FP, et al. Altered renal sodium handling in men with abdominal adiposity: a link to hypertension. *J Hypertens.* 2001;19:2157-2164.
9. Riserus U, Arnlov J, Brismar K, Zethelius B, Berglund L, Vessby B. Sagittal abdominal diameter is a strong anthropometric marker of insulin resistance and hyperproinsulinemia in obese men. *Diabetes Care.* 2004;27:2041-2046.
10. Turcato E, Bosello O, Di Francesco V, et al. Waist circumference and abdominal sagittal diameter as surrogates of body fat distribution in the elderly: their relation with cardiovascular risk factors. *Int J Obes Relat Metab Disord.* 2000;24:1005-1010.
11. Riedner CE, Rhoden EL, Ribeiro EP, Fuchs SC. Central obesity is an independent predictor of erectile dysfunction in older men. *J Urol.* 2006;176(4 Pt 1):1519-1523.
12. Ochs-Balcom HM, Grant BJ, Muti P, et al. Pulmonary function and abdominal adiposity in the general population. *Chest.* 2006;129:853-862.
13. Stranges S, Trevisan M, Dorn JM, Dmochowski J, Donahue RP. Body fat distribution, liver enzymes, and risk of hypertension: evidence from the Western New York Study. *Hypertension.* 2005;46:1186-1193.
14. Stranges S, Dorn JM, Muti P, et al. Body fat distribution, relative weight, and liver enzyme levels: a population-based study. *Hepatology.* 2004;39:754-763.
15. Nordhamn K, Sodergren E, Olsson E, Karlstrom B, Vessby B, Berglund L. Reliability of anthropometric measurements in overweight and lean subjects: consequences for correlations between anthropometric and other variables. *Int J Obes Relat Metab Disord.* 2000;24:652-657.