

Clinical Digest

ONLINE EDITION

GERIATRICS

Undiagnosed Diabetes in an Elderly Population

A considerable number of people with diabetes mellitus (DM) are age 65 or older, and many elderly people with DM do not display such classic DM symptoms as polyuria and polydipsia due to age-related malfunction of the mechanisms leading to these disease signs. Other signs of DM may be masked by comorbid conditions or chalked up to aging, and cognitive decline can make diagnosis even more difficult. Only when DM complications become present, and when fasting plasma glucose levels are significantly elevated, is the disease recognized. With these factors in mind, researchers at Meir Medical Center, Kjar Saba; Frieda Schiff Warburg Geriatric Center, Netanya; Meuhedet Health Care System, Shomron District; and the Tel Aviv University Sackler School of Medicine, Ramat Aviv, all in Israel, conducted a study to determine the prevalence of undiagnosed DM among elderly patients in long-term care who receive enteral nutrition and have severe cognitive problems.

Their prospective, 29-month study included 141 patients, 76% of them women, with a mean age of 77 years. The patients had a mean Mini-Mental State Examination score of 1.29, and 136 (96%) of them had a diagnosis of dementia with severe cognitive impairment. The researchers tested patient's fasting and postprandial glucose levels, as well as their hemoglogin $A_{\rm lc}$ (HbA $_{\rm lc}$) levels. Diabetes was defined as an HbA $_{\rm lc}$ level greater than

7%. Using these results and patients' records, they divided the patients into a group with diagnosed DM, a group with undiagnosed DM, and a group without DM.

The researchers found that, while only 37 (26%) of the patients had been diagnosed with DM at baseline, 66 (47%) of the patients actually had DM. Although patients without DM and patients with previously undiagnosed DM had similar fasting plasma glucose and postprandial glucose levels, they had different HbA_{1c} levels (P < .0001).

The researchers recommend using $\mathrm{HbA}_{\mathrm{lc}}$ levels to detect diabetes in elderly patients receiving long-term enteral nutrition. They note that $\mathrm{HbA}_{\mathrm{lc}}$ testing can be performed easily without altering patient feeding patterns.

Source: *Arch Gerontol Geriatr*. 2008;47(3):383–393. doi: 10.1016/j.archger.2001.09.001.

SUBSTANCE ABUSE

Auditing the Risk for Unhealthy Alcohol Use

The Alcohol Use Disorders Identification Test (AUDIT), a popular 10-question screening tool, has a condensed, three-question version—the AUDIT-Consumption (AUDIT-C). Studies have shown that the AUDIT-C is a time-saver for detecting unhealthy alcohol use. But is it as accurate as the AUDIT?

To find out, researchers from University Medical Center Freiburg, Freiburg and University Medical Center Hamburg-Eppendorf, Hamburg, both in Germany, examined data from 14 published studies comparing the tests. Most of the studies were conducted in primary care settings in Europe and the United States. They included sample sizes ranging from 112 to 13,438 patients.

The researchers say that, while the studies' data are inconclusive, they suggest that AUDIT may be superior to AUDIT-C for identifying unhealthy alcohol use in some settings. Findings from a few studies on general population samples and inpatients suggested, but did not prove, that the AUDIT might be better than the AUDIT-C for identifying such severe conditions as alcohol dependence. In quantitative analyses, the accuracy of the AUDIT and the AUDIT-C did not differ significantly for screening of risky drinking, alcohol use disorder, or unhealthy alcohol use. That finding, however, was based on small sets of heterogeneous studies with different reference standards, so the researchers caution that the results do not show both tests as equally effective. Furthermore, some pooled analyses suggested that primary care patients with a positive AUDIT screening result were more likely than those with a positive AUDIT-C screening result to be engaged in risky drinking.

The researchers recommend a collaborative meta-analysis of individual patient data to compare the two tests more accurately. Until better evidence is available, they say, "the issue of whether [three] questions are enough to detect unhealthy alcohol use remains without a definite answer."

Source: Ann Intern Med. 2008;149(1):879-888.