Diabetes is the seventh leading cause of death in the US and its prevalence is expected to increase dramatically among older adults in the coming years. In particular, Mexican Americans, a fast-growing segment of the US population, are disproportionately affected by type 2 diabetes. Recent research estimates the prevalence of diabetes among Mexican Americans aged 75 years and older to be around 37% in 2004/2005, a rate higher than the prevalence of 15.4% among non-Hispanic white adults of equivalent age. Also, Mexican Americans with diabetes have high rates of diabetes-related complications, in part due to multiple comorbidities (eg, hypertension) and suboptimal adherence to diabetes medication.

National trends show that the treatment prescribed to patients with type 2 diabetes has changed over the past decade with the advent of new medications and the introduction of new practice recommendations for older populations. Data from the National Disease and Therapeutic Index show a declining use of insulin from 38% to 25% between 1994 and 2007. Concomitantly, new...
oral antidiabetes therapies have been introduced into the US market. The American Diabetes Association (ADA) also recommends that physicians optimize the treatment of conditions commonly associated with diabetes (eg, hypertension and hyperlipidemia). These treatment recommendations, along with more medication options, may help reduce diabetes-related complications, potentially leading to increased quality of life. However, use of medications in older patients with diabetes to achieve target goals of glycemia, lipids, and blood pressure may not always lead to reduced cardiovascular events (eg, stroke and myocardial infarction) or increased quality of life unless adequate attention is paid to optimal management of specific geriatric syndromes.8,10

Geriatric syndromes are a group of conditions (eg, urinary incontinence, depression, cognitive impairment, pain, and functional disability) with a common multifactorial etiology often seen in frail older adults.12 These conditions are highly prevalent in persons with diabetes.13,14 A 7-year prospective cohort study of initially nondisabled Mexican Americans aged 65 years and older (N = 1835) showed that participants with diabetes were more likely to report any limitation in lower body activities of daily living (ADL) function (HR 2.05; 95% CI 1.58 to 2.67), mobility tasks (HR 1.69; 95% CI 1.39 to 2.04), and 8-foot walk (HR 1.46; 95% CI 1.15 to 1.85) compared to those with no history of diabetes.14 These findings remained significant even after controlling for age, sex, medical conditions, vision function, cognition, and obesity at baseline. Other researchers have also shown that elderly persons with diabetes have a higher rate of depressive symptoms, disability, incontinence, vision impairment, and health service use than those without diabetes.14 However, little is known about changes in diabetes treatments over time and whether such changes are accompanied by changes in the prevalence of geriatric syndromes over time in Mexican Americans aged 75 years and older.

To address this gap in knowledge, this study examined the trends in use of diabetes medications and the prevalence of geriatric syndromes from 1993/1994 to 2004/2005 in Mexican Americans aged 75 years and older, using data from 2 samples of subjects participating in the Hispanic Established Population for the Epidemiologic Study of the Elderly (Hispanic EPESE). This study builds on previous research describing older Mexican Americans with diabetes.5,13,14 With the advent of newer antidiabetes medications over the last decade and increasing public education about ensuring good diabetes control, we hypothesized that the prevalence of geriatric syndromes would be lower in the 2004/2005 cohorts than in the 1993/1994 cohorts of Mexican American elders with diabetes. Our hypothesis was derived from the well-known diabetes-associated complications of stroke, neuropathy (painful sensory, autonomic, and motor subtype), and peripheral artery disease (pain from ischemic limbs and amputations); these complications may indirectly influence the onset and progression of geriatric syndrome conditions (eg, motor disability, impaired cognition, pain, and urinary incontinence).

Methods

SAMPLE

The sample for this study was obtained from the Hispanic EPESE, a longitudinal community-based study of older Mexican Americans residing in the southwestern US (Texas, California, Arizona, Colorado, and New Mexico). The baseline sample interviewed in 1993/1994 included 3050 Mexican Americans aged 65 years and older selected through a multistage area probability sampling procedure. This sample selection methodology ensured that results would be generalizable to approximately 500,000 older Mexican Americans. Details of the sampling strategy are described elsewhere.15 In 1993/1994, 1332 subjects were aged 75 years and older. In 2004/2005 a new sample of Mexican Americans aged 75 years and older (n = 902) was added to the study using a similar sampling strategy. In this study, the sample included subjects aged 75 years and older with diabetes in 1993/1994 (n = 284) and in the new cohort added in 2004/2005 (n = 324). In the 1993/1994 cohort there was medication information on 196 subjects and, in 2004/2005, on 284 subjects. Those without medication data were significantly more likely to be older and have instrumental ADL (IADL) disabilities. The University of Texas Medical Branch Institutional Review Board on human protection and research ethics approved the study.

MEASURES

Subjects were coded as having diabetes if in 1993/1994 and 2004/2005 they reported that they had been told by a physician that they had diabetes, glucose in their urine, high blood glucose levels, or if they were found to be on any antidiabetes drugs upon inspection of the medications they had taken in the 2 weeks prior to the interview.

MEDICATIONS

Diabetes treatment was determined by categorizing each subject's medications. Medications were ascertained by asking each respondent to show the interviewer all drugs taken in the 2 weeks prior to the interview. Subjects were considered to be on diabetes treatment if oral antidiabetes medications and/or insulin were found during the medications inspection process. Antidiabetes drug treatment was classified into 4 groups: oral antidiabetes medication only, insulin only, taking both oral antidiabetes medication and insulin, and receiving no treatment. The antidiabetes medications were also classified by drug class. Drug classes in-
cluded sulfonylureas only, biguanides, multiple combinations of medications, and others. The combination medication category included single-pill formulations containing 2 medications as well as multiple medications taken in more than 1 pill. The other category included meglitinide derivatives and thiazolidinediones. These medications were combined into 1 category due to the small number of respondents taking them. Lastly, patients not on any treatment for their diabetes were classified as receiving no treatment.

BLOOD PRESSURE MEASUREMENTS AND USE OF ANGIOTENSIN INHIBITORS

Blood pressure was measured by average standing blood pressure reading and dichotomized as <130/80 and ≥130/80 mm Hg. Additionally, the participants were also assessed for the use of angiotensin inhibitors (eg, angiotensin-converting enzyme inhibitors and angiotensin receptor antagonists). Subjects were considered to be on an angiotensin inhibitors if angiotensin inhibitor medications were found during the medication inspection process. We included assessment of blood pressure goal <130/80 mm Hg and use of angiotensin inhibitors because they are practice recommendations by the ADA. Optimal blood pressure control and angiotensin inhibitor use have been shown to reduce the risk of diabetes-related kidney damage.

GERIATRIC SYNDROMES

Geriatric syndromes assessed in this study were cognitive function, presence of pain, arthritis, incontinence, and physical function. Cognitive function was dichotomized as a score of <21 (impaired or poor cognition) and ≥21 (normal or good cognition) using the Mini-Mental State Examination. The presence of pain was measured with the question, “In the past month, did you notice any pain or discomfort when you stood or walked?” Answers were coded as “1” for having pain and “0” for no pain, during data analysis. Subjects were coded as having arthritis if they indicated that a physician or health-care professional told them they had arthritis. The response to the question was coded as yes versus no. Incontinence was measured by a self-report question asking each subject, “How often do you have difficulty holding your urine until you can get to a toilet—never, hardly ever, some of the time, most of the time, or all of the time?” Incontinence was dichotomized into 2 groups: those who had difficulty some or most of the time versus the others. Physical function was measured by 2 self-report questions on ADL and IADL. ADL disability was determined by needing assistance with one or more of the following: bathing, grooming, dressing, eating, transferring, or toileting. IADL disability was determined by needing assistance with one or more of the following: using the telephone, driving, shopping, preparing meals, doing light housework, taking medicine, or handling money. Additionally, a measured assessment of physical function was included using the Performance Oriented Mobility Assessment (POMA). The POMA consists of standard measured assessments of standing, balance, and walking speed. The POMA total was categorized as 1-4, 5-8, and 9-12. Additionally, balance, chair stands, and walking a normal pace were analyzed separately.

COVARIATES

Other covariates included in the analyses included age, sex, marital status, education, body mass index (BMI), self-reported hypertension, duration of diabetes, and health insurance coverage. Age was measured on a continuous scale. Sex was coded 1 for female and 0 for male. BMI was calculated from measured height and weight and categorized into <25, 25-29, and ≥30 kg/m². Hypertension was determined through a self-report question asking each subject, “Has a doctor ever told you that you have high blood pressure?” Health insurance was categorized into 4 groups: no insurance, Medicare only, Medicare and Medicaid, or private insurance and Medicare.

STATISTICAL ANALYSIS

The descriptive characteristics of the sample were calculated as means and 95% confidence intervals for continuous variables and proportions for categorical variables. All comparisons were made using Rao-Scott χ² for categorical variables and t-test statistics for continuous variables. The prevalence of diabetes treatment and geriatric conditions was estimated in both cohorts using the Rao-Scott χ² test. SAS version 9.2 survey procedures software (SAS Inc., Cary, NC) was used to perform all analyses.

Results

Table 1 shows the descriptive characteristics of the 2 cohorts. The duration of diabetes significantly increased, from 13.1 years in 1993/1994 to 17.0 years in 2004/2005 (p = 0.001). The percentage of overweight (BMI 25–29 kg/m²) persons with diabetes increased from 35.2% in 1993/1994 to 42.7% in 2004/2005 and of obese (BMI ≥30 kg/m²) persons increased from 28.1% to 36.7% (p = 0.003). The prevalence of self-reported hypertension also increased from 48.1% in 1993/1994 to 70.7% in 2004/2005 (p < 0.001).

Table 2 presents the prevalence of antidiabetics medication use in 1993/1994 and 2004/2005. As expected, subjects in the 2004/2005 cohort used more medications, especially newer medications not available in 1993/
Trends in Diabetes Medication Use and Prevalence of Geriatric Syndromes in Older Mexican Americans

1994. As expected, with new oral medications, less insulin use was observed. Overall, the treatment rate for diabetes, either with oral hypoglycemics or insulin, did not change between 1993/1994 and 2004/2005. However, the use of insulin as the only antidiabetes treatment significantly decreased from 20.3% in 1993/1994 to 7.5% in 2004/2005. Also, as expected, the number of medications taken by the subjects increased significantly over time (p = 0.001).

Table 3 shows the prevalence of geriatric syndromes among the 2 cohorts. Subjects in the 2004/2005 cohort were more likely to have more geriatric syndromes, including pain, arthritis, and incontinence, than those in the 1993/1994 cohort. Additionally, self-reported ADL disability increased between the 2 time periods.

The prevalence of pain nearly doubled between the 2 time periods, from 37.1% in 1993/1994 to 61.1% in 2004/2005 (p < 0.001). The prevalence of arthritis increased from 49.9% in 1993/1994 to 63.8% in 2004/2005. The prevalence of incontinence also increased, from 17.6% in 1993/1994 to 39.7% in 2004/2005 (p < 0.001). The only measure of function that significantly changed between 1993/1994 and 2004/2005 was self-reported ADL disability, which increased from 29.5% in 1993/1994 to 41.5% in 2004/2005 (p = 0.047). There was no significant difference in cognitive and physical function between 1993/1994 and 2004/2005. There were significant cohort differences in reported pain and incontinence, but not in other measures of geriatric syndromes (data not shown).

Discussion

We examined trends in antidiabetes medication use between 1993/1994 and 2004/2005 and whether these trends would be accompanied by changes in the prevalence of geriatric syndromes over the same period in older Mexican Americans with diabetes. Those in the 2004/2005 cohort were more likely to be taking 2 or more oral antidiabetes drugs than were those in the 1993/1994 cohort. The use of insulin as sole diabetes therapy was lower (7.5%) among the 2004/2005 cohort compared with the 1993/1994 cohort (20.3%). Sulfonylurea and insulin use decreased and metformin use increased in the new cohort. The 2004/2005 cohort reported longer diabetes duration and higher prevalence of obesity and hypertension. Subjects in the 2004/2005 cohort were also more likely than those in the 1993/1994 cohort to have geriatric syndrome conditions; pain, arthritis, incontinence, and self-reported ADL disability. No significant differences existed between the 2 cohorts in objective measures of cognitive and physical function.

The observation that conditions that make up the geriatric syndromes have increased in prevalence over 10 years is a surprising finding; we thought the exposure of the 2004/2005 cohort to newer (and presumably more effective) diabetes medications would translate to better health outcomes, as defined by lower rates of geriatric syndromes. Our findings of high rates of geriatric syndromes in seniors with diabetes are consistent with past research suggesting that current clinical guidelines may not always be adequate for frail older adults with diabetes.11,21 Our findings of increased geriatric syndromes in the 2004/2005
cohort despite exposure to newer medications suggest that screening for and managing comorbid geriatric syndromes, in addition to following ADA-recommended guidelines, is important to the overall health of elderly patients living with diabetes. Future study is needed to examine potential association between level of glycemic control (ie, hemoglobin A_{1C} value) and increased prevalence of geriatric syndromes in the 2004/2005 cohort. Unfortunately, our database did not have these blood measures to compare.

This study provides insight into the management of diabetes among very old Mexican Americans, filling a gap in

### Table 2. Prevalence of Diabetes Treatment and Angiotensin Inhibitor Use by Time Period

<table>
<thead>
<tr>
<th></th>
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</thead>
<tbody>
<tr>
<td></td>
<td>(n = 196)</td>
<td>(n = 284)</td>
<td></td>
</tr>
<tr>
<td>Number of oral hypoglycemic drugs</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>0</td>
<td>89 (47.7)</td>
<td>101 (36.4)</td>
<td>0.001</td>
</tr>
<tr>
<td>1</td>
<td>105 (51.1)</td>
<td>144 (49.7)</td>
<td></td>
</tr>
<tr>
<td>≥2</td>
<td>2 (1.0)</td>
<td>39 (13.9)</td>
<td></td>
</tr>
<tr>
<td>Oral hypoglycemic drug only</td>
<td>104 (50.1)</td>
<td>172 (60.6)</td>
<td>0.079</td>
</tr>
<tr>
<td>Insulin only</td>
<td>32 (20.3)</td>
<td>26 (7.5)</td>
<td>0.001</td>
</tr>
<tr>
<td>Oral hypoglycemic drug and insulin</td>
<td>3 (1.6)</td>
<td>11 (2.95)</td>
<td>0.309</td>
</tr>
<tr>
<td>Any treatment (oral hypoglycemic or insulin)</td>
<td>139 (72.6)</td>
<td>209 (71.1)</td>
<td>0.090</td>
</tr>
<tr>
<td>No treatment</td>
<td>57 (27.4)</td>
<td>75 (28.8)</td>
<td>0.764</td>
</tr>
<tr>
<td>Medications</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>angiotensin inhibitor</td>
<td>45 (23.1)</td>
<td>82 (29.6)</td>
<td>0.204</td>
</tr>
<tr>
<td>sulfonylurea only</td>
<td>104 (50.8)</td>
<td>63 (19.1)</td>
<td>&lt;0.001</td>
</tr>
<tr>
<td>combination drug</td>
<td>3 (1.5)</td>
<td>45 (16.0)</td>
<td>&lt;0.001</td>
</tr>
<tr>
<td>metformin only</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>other</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Unweighted frequencies and weighted percents.*

### Table 3. Prevalence of Geriatric Conditions by Time Period

<table>
<thead>
<tr>
<th></th>
<th>1993/1994 (n = 242)</th>
<th>2004/2005 (n = 324)</th>
<th>p Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cognitive function score &lt;21 (MMSE), n (%)</td>
<td>100/242 (47.4)</td>
<td>179/324 (53.8)</td>
<td>0.558</td>
</tr>
<tr>
<td>Pain, n (%)</td>
<td>67/190 (37.1)</td>
<td>184/316 (61.1)</td>
<td>&lt;0.001</td>
</tr>
<tr>
<td>Arthritis, n (%)</td>
<td>111/242 (46.9)</td>
<td>199/320 (61.9)</td>
<td>0.006</td>
</tr>
<tr>
<td>Incontinence, n (%)</td>
<td>25/157 (16.0)</td>
<td>120/313 (38.7)</td>
<td>&lt;0.001</td>
</tr>
<tr>
<td>Any ADL disability, n (%)</td>
<td>75/241 (29.5)</td>
<td>141/324 (43.5)</td>
<td>0.047</td>
</tr>
<tr>
<td>Any IADL disability, n (%)</td>
<td>180/242 (75.9)</td>
<td>256/324 (79.0)</td>
<td>0.580</td>
</tr>
<tr>
<td>Total POMA score, n (mean, 95% CI)</td>
<td>227 (4.13 [3.56 to 4.07])</td>
<td>307 (4.73 [3.86 to 5.59])</td>
<td>0.248</td>
</tr>
<tr>
<td>POMA categories, n (%)</td>
<td></td>
<td></td>
<td>0.615</td>
</tr>
<tr>
<td>unable to do</td>
<td>66/196 (33.9)</td>
<td>92/314 (30.0)</td>
<td></td>
</tr>
<tr>
<td>1-4</td>
<td>36/196 (18.3)</td>
<td>71/314 (22.2)</td>
<td></td>
</tr>
<tr>
<td>5-8</td>
<td>60/196 (32.2)</td>
<td>85/314 (27.7)</td>
<td></td>
</tr>
<tr>
<td>9-12</td>
<td>34/196 (20.2)</td>
<td>66/314 (20.1)</td>
<td></td>
</tr>
<tr>
<td>Balance—standing, n (%)</td>
<td>130/232 (58.2)</td>
<td>160/307 (51.9)</td>
<td>0.397</td>
</tr>
<tr>
<td>Chair stands, n (%)</td>
<td>120/219 (57.2)</td>
<td>157/280 (55.2)</td>
<td>0.866</td>
</tr>
<tr>
<td>Walk normal pace, n (%)</td>
<td>156/229 (69.6)</td>
<td>209/306 (67.5)</td>
<td>0.716</td>
</tr>
</tbody>
</table>

ADL = activities of daily living; IADL = instrumental activities of daily living; MMSE = Mini-Mental Status Examination; POMA = Performance Oriented Mobility Assessment.

*Unweighted frequencies and weighted percents.*

*Excludes mobility items.*
knowledge about trends in antidiabetes medication use and the prevalence of geriatric syndromes in this population. Our findings suggest that quality of care indicators for diabetes in the very old should include prevention and management of comorbid geriatric syndromes, in addition to the ADA-recommended guidelines of optimal glycemic, blood pressure, and lipid control.11,12 The standard ADA treatment guidelines suggest that persons with diabetes meet strict glycemic, lipid, and blood pressure control to prevent diabetes-related complications. In the face of the recently published data from the New England Journal of Medicine,8,9 adherence to these guidelines may not necessarily decrease cardiovascular events and other complications, especially in frail elders with multiple comorbidities and limited life expectancy. Findings from our study and others8-12 thus underscore the importance of incorporating management of geriatric syndromes as part of routine care for elderly patients living with diabetes.

Delaying or preventing the onset of the conditions that make up geriatric syndromes has been shown to improve seniors’ quality of life, preserve their ability to live independently, and delay nursing home placement.10,12 Considerations of presence of geriatric syndromes, quality of life, and life expectancy are increasingly important in evaluating quality of care for older patients,12,22 in addition to ADA-recommended indicators of diabetes control. Strict adherence to ADA guidelines may paradoxically result in unwanted outcomes in older patients with diabetes. For example, in a 3.5-year randomized study (the ACCORD [Action to Control Cardiovascular Risk in Diabetes Study Group] Trial) of 10,251 patients with diabetes (mean age 62.2 years), those with tightly controlled diabetes (median A1C 6.4%) were 22% (HR 1.22; 95% CI 1.01 to 1.46; p = 0.04) more likely to die compared to those with less tight control (A1C 7.0-7.9%).23 Patients in the tight control group also experienced more hypoglycemic episodes and weight gain of over 10 kg.23 Again, because of lack of blood data in our study, we cannot investigate the association between glycemic control and presence of geriatric syndromes.

It is not clear how diabetes might be associated with increased risk of geriatric syndromes. The increase in BMI and longer duration of diabetes among the 2004/2005 cohort are potential explanations for the increased rate of geriatric syndromes we observed over time. Diabetes is known to alter neuromuscular functions as a result of neuropathic and vasculopathic changes.16-18,24 Such alterations in function might over time lead to decreased mobility and ADL ability, poor bladder control, and high risk of neuropathic pain. Subjects in the 2004/2005 cohort had a higher BMI than those in the 1993/1994 cohort. The increase in obesity and overweight in the new cohort might also have contributed to the higher rates of incontinence, pain, and arthritis, a finding consistent with past research.24 In a cross-sectional study of 925 community-dwelling elderly women aged 70 years and older, obesity was independently associated with greater likelihood of reporting pain (OR 1.46; 95% CI 1.07 to 2.01) and urinary incontinence (OR 1.44; 95% CI 1.08 to 1.92).24 This increase in overweight/obesity in the 2004/2005 cohort suggests that clinicians should increase their efforts in the management of obesity in elderly patients with diabetes; these efforts may have potential to decrease the occurrence of geriatric syndromes in this population.

Another area needing more effort from clinicians is optimal blood pressure management. The results of our study showed that, despite over 70% of subjects reporting having hypertension in 2004/2005, only 30% reached the goal blood pressure recommended by the ADA. This finding suggests a need to develop and test more effective and culturally appropriate ways to improve hypertension management in older Mexican Americans with diabetes. This population will be prime candidates for use of angiotensin inhibitors as first-line antihypertensive agents. The finding of poor blood pressure control in this population may in part explain some of the previously reported increased risk of kidney problems in older Mexican Americans with diabetes.5

The limitations of our study include the use of self-report for diagnosis of diabetes rather than use of fasting plasma glucose levels. However, self-reported diabetes has been found to be a highly reliable measure.25-28 Because of the absence of blood data in our study, we could not test the association between tight glycemic control as measured by A1C and increased risk of geriatric syndromes. Examining this association is an important area for future research. The lack of blood measurements in our study precluded testing whether the increased prevalence of geriatric syndromes in the new cohort is related to high A1C level and diabetes duration. Finally, the prevalence of geriatric syndromes reported in this study may have been influenced by the level of awareness of the conditions. Awareness of disease was not a factor included in the survey.

In conclusion, older Mexican Americans with diabetes in 2004/2005 used more metformin and less sulfonylurea compared to the 1993/1994 cohorts. Use of insulin as the sole diabetes therapy was also lower in the 2004/2005 cohort. Subjects in the 2004/2005 cohort had a higher prevalence of obesity and hypertension; they were also more likely than those in the 1993/1994 cohort to have more geriatric syndromes: pain, arthritis, incontinence, and self-reported ADL disability. Because of the higher BMI in the new cohort, it is possible that clinicians may be adjusting their practice by prescribing more metformin and less sulfonylureas for those in the new cohort who are overweight; metformin is associated with weight loss, while sulfonylureas tend to promote weight gain. For very old Mexican Americans with diabetes, our findings of increasing prevalence of comorbid geriatric syndromes suggest that preventing and managing these comorbidities is increasingly important for optimal geriatric diabetes care. Any interven-
tion to manage these comorbidities (eg, drugs for impaired cognition) will require a consideration of the elderly patient’s remaining life expectancy, the patient’s preferences, evidence-based data for cost-effectiveness, and potential harms from polytherapy. Additional studies are needed to investigate potential explanatory mechanisms (eg, increasing BMI) for the increasing prevalence of incontinence, ADL disability, and other geriatric syndromes in older patients with diabetes. Such studies might inform development and implementation of interventions to reduce the burdens of diabetes-related morbidity in the elderly.

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Conflict of Interest: Authors reported none

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References

Trends in Diabetes Medication Use and Prevalence of Geriatric Syndromes in Older Mexican Americans

Tendencias en la Utilización de Medicamentos Diabéticos y Tasa de Prevalencia de los Síndromes Geriátricos en Mexicanos-Americanos con Edad Avanzada de 1993/1994 a 2004/2005

HA Beard, KS Markides, M Al Ghatrif, Y-F Kuo, y MA Raji


EXTRACTO

TRANSFONIX: Los nuevos medicamentos diabéticos que se han introducido durante la última década han producido cambios en las recomendaciones de tratamiento para un número mayor de pacientes ancianos con diabetes. Sin embargo, no está claro si estos cambios han sido acompañados por cambios en la prevalencia de co-morbilidad en los síndromes geriátricos.

OBJETIVO: Determinar si los cambios en el tratamiento de la diabetes entre 1993/94 y 2004/05 fueron acompañados por cambios en la prevalencia de los síndromes geriátricos en mexicanos-americanos que tenían 75 años y más de edad.

MÉTODOS: Se utilizó datos del “Hispanic Established Population for the Epidemiologic Study of the Elderly”. Se incluyó en el análisis participantes con diabetes que tenían 75 años y más de edad en 1993/94 (n = 284) y 2004/05 (n = 324, se añadió un grupo nuevo en 2004/05). Se estimó las tasas de prevalencia del uso de medicamentos y de los síndromes geriátricos y estos fueron comparados usando estadística descriptiva y univariada para las variables continuas y tablas de contingencia (χ²) para las variables categóricas.

RESULTADOS: Los mexicanos-americanos diabéticos de mayor edad estaban más propensos en estar tomando dos o más medicamentos diabéticos orales en 2004/05 que en el caso del grupo de 1993/94. La mayoría de estos medicamentos diabéticos orales fueron nuevos y de reciente introducción. El uso de la insulina como terapia diabética única disminuyó a partir de un 20.3% en el grupo de 1993/94 a un 7.5% en el grupo de 2004/05. El grupo de 2004/05 demostró tener una duración de diabetes mayor y una prevalencia mayor de obesidad e hipertensión. Este grupo también estaba más propenso que el de 1993-94 a tener más síndromes geriátricos: dolor, artritis, incontinencia y discapacidad en actividades de la vida diaria. No hubo diferencias significativas entre los dos grupos en las medidas objetivas de la función cognoscitiva y física.

CONCLUSIONES: En 2004/05, los mexicanos-americanos diabéticos de mayor edad usaron más de los medicamentos antidiabéticos nuevos y menos insulina en comparación al grupo de 1993/94. Los índices de prevalencia de los síndromes geriátricos fueron más altos en el grupo de 2004/05. Nuestros resultados sugieren que la investigación y el tratamiento de la co-morbilidad de los síndromes geriátricos es cada vez más importante en el cuidado óptimo del paciente geriátrico con diabetes.

Traducido por Carlos da Camara


HA Beard, KS Markides, M Al Ghatrif, Y-F Kuo, et MA Raji


RÉSUMÉ

OBJECTIFS: Déterminer si les changements dans le traitement du diabète entre les années 1993/94 et 2004/05 ont été accompagnés par des changements dans la prévalence des syndromes gériatiques chez les Mexicanos-Américains de plus de 75 ans.

MÉTHODES: Les données de l’étude épidémiologique de la population hispanique ont été utilisées. Les participants âgés de plus de 75 ans avec un diabète en 1993/94 (n = 284) et en 2004/05 (n = 324, nouvelle cohorte rajoutée en 2004/05) ont été inclus dans l’analyse. L’utilisation des médicaments et la prévalence des syndromes gériatiques ont été estimés et comparés en utilisant des statistiques descriptifs et univariés pour les variables continues et les tables de contingence (χ²) pour les données catégorielles.

RÉSULTATS: Les Mexicanos-Américains âgés avec un diabète en 2004/05 étaient plus à risque de prendre 2 ou plus médicaments hypoglycémiant oraux que ceux de la cohorte de 1993/94; et la plupart recevaient les nouveaux médicaments pour le traitement du diabète. L’utilisation de l’insuline comme traitement unique a diminué de 20,3% pour la cohorte de 1993/94 à 7,5% pour la cohorte de 2004/05. Le groupe de 2004/05 a présenté une durée plus longue de diabète ainsi qu’une prévalence plus élevée d’obésité et d’hypertension. Il présentait également plus de syndromes gériatiques que la cohorte de 1993-94 soit de la douleur, de l’arthrite, de l’incontinence et une incapacité auto-déclarée des activités de la vie quotidienne. Aucune différence significative n’a été décrite entre les 2 cohortes quant à la fonction cognitive et physique dans les mesures objectives.

CONCLUSIONS: En 2004/05, les Mexicanos-Américains âgés avec un diabète utilisaient plus de nouveaux médicaments et moins d’insuline que la cohorte de 1993/94 cohorte. La prévalence de syndromes gériatiques était plus élevée dans la cohorte de 2004/05. Les résultats suggèrent qu’une évaluation et d’un traitement des syndromes gériatiques demeurent des éléments importants dans le traitement optimal du diabète chez les personnes âgées.

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