

Diagnosis and Treatment of Diabetes in Asians-Americans

Dr. George L. King MD

Asian American Diabetes Initiative (AADI)

Joslin Diabetes Center

Thomas J. Beatson, Jr. Professor of Medicine

Harvard Medical School

Two Main Types of Diabetes

Type 1 diabetes

5-10% of total
(Rare in Asians)

Common in children
(A Minority in East Asian Children)

Insulin Requiring
Auto-immune Destruction of the Islets, HLA DR3/4

Type 2 diabetes

>90% of total (>95% in AA)

Mostly in adults,
but increasing in children
(higher risk for AAs)

Not insulin requiring

Insulin resistant
associated with obesity ,
inflammation and inactivity
(Different definition of obesity; AA
develops diabetes at low or normal
body weight)

Not all Asians have same diabetes risk

Race	Diabetes risk (HR)
White	1
Chinese	1.87
Blacks	1.99
South Asian	3.4

Adjusted for age, sex, BMI, and sociodemographic characteristics

Diabetes care. 2011;34:1741-8.

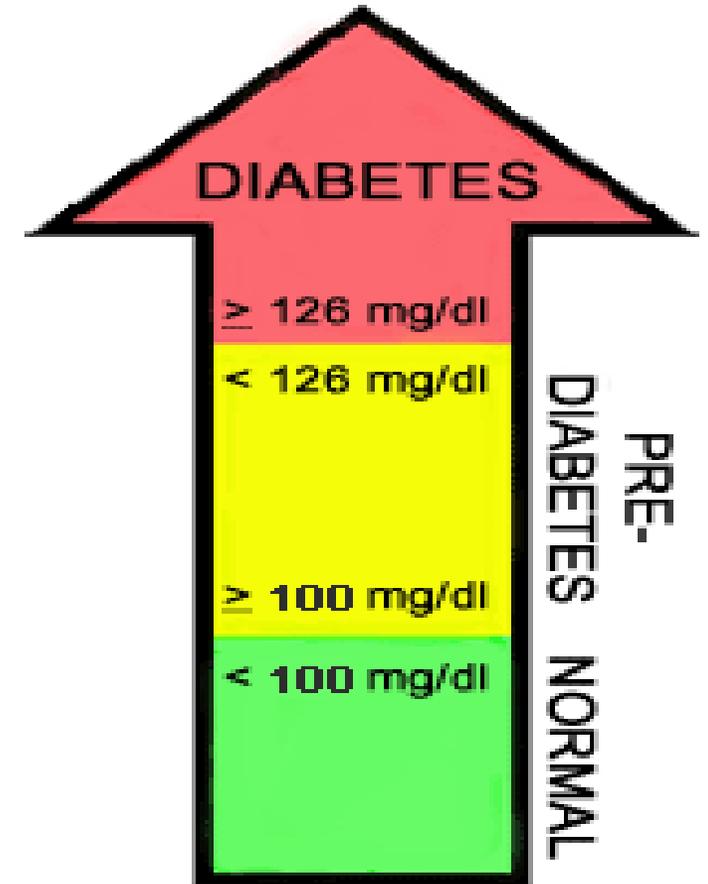
Diagnosing: fasting blood glucose level

- **Diabetes**

- Fasting blood glucose of 126 mg/dl or higher

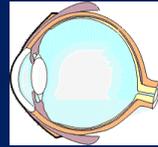
- **Pre-diabetes (impaired fasting glucose)**

- Fasting blood glucose of 100 - 125 mg/dl



Diabetes : Complication Profile

Diabetic Retinopathy



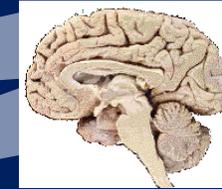
Periodontal Disease



Diabetic Nephropathy



Cognitive Dysfunction

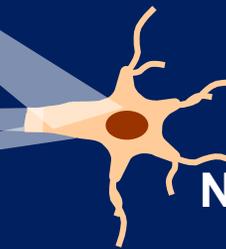


Stroke



Cardiovascular Diseases

Diabetic Neuropathy



Neoplastic Diseases

Well controlled diabetes increases survival from COVID 19

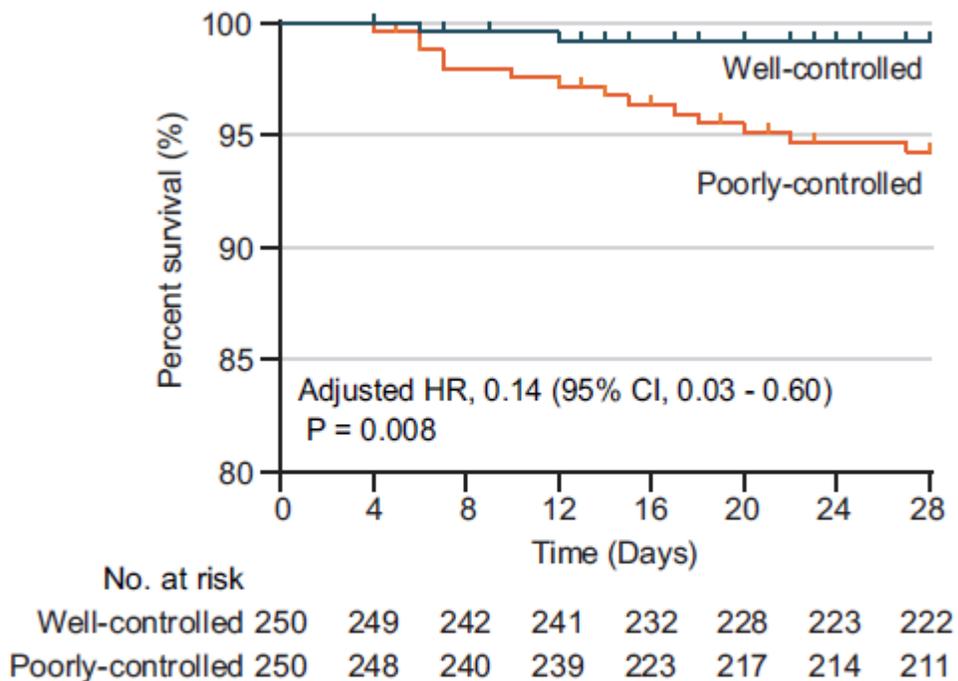


Figure 3. Survival Curves of Patients with Well-Controlled BG or Poorly Controlled BG in the PSM Model

Zhu et al., 2020, Cell Metabolism 31, 1068–1077

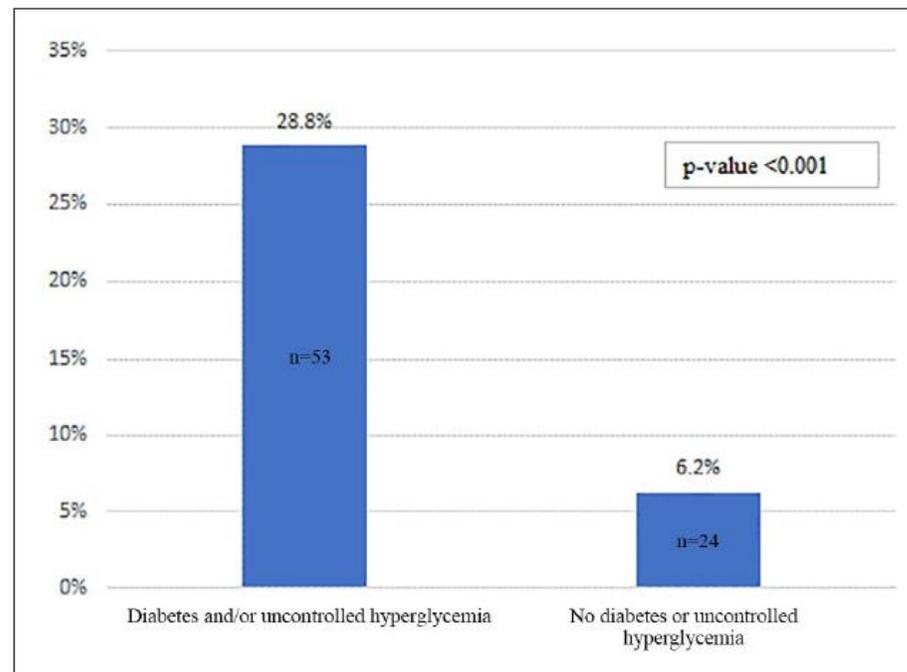


Figure 3. Mortality rates among patients who were discharged or died comparing diabetes and/or uncontrolled hyperglycemia (n = 184) with patients without diabetes or hyperglycemia (n = 386).

Bode, et al. Journal of Diabetes Science and Technology 2020, Vol. 14(4) 813– 821

Culturally Precision Medicine for Diabetes Care in Asian Americans.

Culturally Appropriate Care

Asian Clinic
at Joslin Diabetes Center

Research

Clinical research on
lifestyle intervention

Asian American Diabetes Initiative (AADI)

Advocacy and Community Outreach

Local, national and
international program &
collaborations

Education

Patient education materials,
professional education,
interactive website & tools

