Diabetes Evaluation Sheet


Our institute, National Center for Global Health and Medicine Kohnodai Hospital treats many severe diabetic patients and studies various aspects of diabetes. To improve the quality of diagnosis and treatment for diabetes and also to accelerate studies on diabetes worldwide, here we will show our “NCGM Kohnodai Diabetes Evaluation Sheet” (Fig. 1).

This sheet includes the information about age, sex, body height and weight, body mass index, classification (etiology) of diabetes, duration of diabetes, treatments for diabetes, glycemic control, macrovascular and microvascular complications, insulin secretory capacity and insulin resistance, and coronary risk factors. In this sheet, we evaluate nephropathy according to the classification of diabetic nephropathy (The Japan Diabetes Society) made based on the study by Wada T et al [1], and we also evaluate estimated glomerular filtration rate (eGFR) category in chronic kidney disease (CKD) by using KDIGO 2012 CKD Guideline [2]. Furthermore, we evaluate insulin resistance by using homeostasis model assessment of insulin resistance (HOMA-IR), and also evaluate intrinsic insulin secretory capacity by using homeostasis model assessment of β-cell function (HOMA-β) and C-peptide immunoactivity index (CPI index) [3, 4].

Therefore, NCGM Kohnodai Diabetes Evaluation Sheet helps us to make a valid diagnosis and an appropriate treatment for severe diabetic patients. This sheet is also very useful for educating young doctors about diabetes. We produce two to three diabetes specialists every year. Furthermore, this sheet may contribute to our research activities. We have reported 83 English original articles (total impact factor, 185.2) since 2013, by using this sheet.

We strongly hope that the diagnosis and treatment for diabetes, and research of diabetes worldwide will develop by using this sheet.

Conflict of Interest

The authors declare that they have no conflict of interest concerning this article.

References

### NCGM Kohnodai Diabetes Evaluation Sheet

<table>
<thead>
<tr>
<th>Name</th>
<th>Age</th>
<th>Sex</th>
</tr>
</thead>
<tbody>
<tr>
<td>Weight (kg)</td>
<td>Height (cm)</td>
<td>BMI (kg/m²)</td>
</tr>
</tbody>
</table>

#### Classification
- **Type 1**
- **Type 2**
- **Gestational (OGT)**
- **Specific**
  - 1) Nodular diabetes
  - 2) MODY
  - 3) Diabetes due to pancreatic disease
  - 4) Drug or chemical-induced diabetes
  - 5) Others

#### Diabetes Duration (Years)

#### Treatments for Diabetes

#### Glycemic Control
- **Plasma Glucose (mg/dl)**
- **HbA1c (%)**
- **3A (%)**

#### Complications of Diabetes

<table>
<thead>
<tr>
<th>Neuropathy</th>
<th>Symptom</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pinprick</td>
<td>Vibration</td>
</tr>
</tbody>
</table>

| Retinopathy | No DME | mild NPDR | moderate NPDR | severe NPDR | PDR |

<table>
<thead>
<tr>
<th>Proteinuria</th>
<th>Microalbuminuria</th>
<th>microalbuminuria - 30 mg/dl</th>
<th>microalbuminuria - 30 - 250 mg/dl</th>
<th>microalbuminuria - 100 mg/dl</th>
<th>microalbuminuria - 100 - 500 mg/dl</th>
<th>microalbuminuria - 500 mg/dl</th>
<th>microalbuminuria - 500 - 1000 mg/dl</th>
</tr>
</thead>
<tbody>
<tr>
<td>eGFR (mg/dl)</td>
<td>Creatinine GFR</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Maculopathy</th>
<th>EOG</th>
</tr>
</thead>
</table>

| Complications | VCG |

#### Diabetic nephropathy (SNR) stages
- **eGFR (mg/dl) range**
- **albuminuria**
- **eGFR**

#### Insulin Secretion
- **Plasma Glucose (mg/dl)**
- **Fasting**
- **2-hour after meal**
- **Oral glucose load**

#### HOMA-IR
- **HOMA-β**

#### C-peptide (µg/dl)
- **HOMA-IR**
- **HOMA-β**

#### Coronary Risk Factors
- **Blood pressure (mmHg)**
- **HBG (mg/dl)**
- **BMI (kg/m²)**
- **TG (mg/dl)**
- **Smoking (years)**

#### eGFR (ml/min/1.73m²)

#### Insulin independence
- **Insulin-dependent**
- **Insulin non-dependent**

#### Pre-dialysis diagnosis
- **EDL-C < 130 mg/dl**
- **EDL-C > 130 mg/dl**

#### Cardiovascular risk factors
- **EDL-C < 130 mg/dl**
- **EDL-C > 130 mg/dl**

#### Blood pressure (mmHg)
- **Pre-dialysis**
- **Diastolic**
- **Systolic**

#### C-peptide (µg/dl)
- **Pre-dialysis**
- **Systolic**
- **Diastolic**

#### Triglycerides (mg/dl)
- **Pre-dialysis**
- **Systolic**
- **Diastolic**

#### LDL-C (mg/dl)
- **Pre-dialysis**
- **Systolic**
- **Diastolic**

#### HDL-C (mg/dl)
- **Pre-dialysis**
- **Systolic**
- **Diastolic**

#### Smoking (years)
- **Pre-dialysis**
- **Systolic**
- **Diastolic**

#### Figure 1. NCGM Kohnodai Diabetes Evaluation Sheet