Acute Care for Dementia
Mainly Focusing on Somatic Diseases

國立長寿醫療研究中心

National Center for Geriatrics and Gerontology
Policy

The mission of the center is to promote physical and mental health in elderly persons to achieve lifetime independence.
Health and Welfare–related buildings near NCGG

- Geriatric Health Facility (Luminas Obu)
- Group Home
- National Education and Training Facilities for Dementia Care
- Nursing Home
- Aichi Children’s Hospital
- Health Plaza Village
- Genki-no Sato Shopping and Restaurant mall
Today’s Talk

1) Current situation of Acute Care for Dementia in Japan
2) New Government Policy and Direction of Care for Dementia
3) Challenges underlying above direction
4) Solution
Active Working Elderly ↓

Frail Elderly ↑↑

65~74 years old  -0.5 million (14 million)

85 years or older  +2.8 million (7 million)

+6 million (34.6 million; 29%)
Dementia becomes popular disease.

1) Prevalence of Dementia in the elderly: 14.4% 
4.2 million (100 million in Asia in near future)

2) Lifetime Prevalence: 50% 
die with dementia or die before being dementia
Prevention of Aspiration Pneumonia; most popular surgical intervention in Japan

Main result about Percutaneous Endoscopic Gastrostomy (PEG)
1) Annual introduction of PEG is 172000~198000
2) 75% of Patients who took PEG was demented
3) Return to oral intake is rare (11%)
4) Aspiration Pneumonia is most important cause for introduction of PEG (80%)
5) 99% of AHN in home-based care was PEG

2012 MHLW Scientific Grant: Research group for Quality control for model institution of Home based care (Chairman S Oshima NCGG)
Individual research theme: PEG in Terminal Care by Naoki Ikegami
New Policy for Care on Cognitive Disorders
by Japanese Government
June 18, 2012

1) Reduce the number of long hospital stay in mental hospital because of BPSD (Dementia in Place)

2) All general practitioners should treat dementia with mild BPSD

3) General hospital should treat somatic acute geriatric conditions in dementia

4) Persons with dementia should be medically treated without discrimination, limitation or restriction
Age related changes in emergent hospitalization in Japan (2007~2009)
Number of Emergent Admission by Ambulance Car in Japan
A comparison between Number in 1999 and 2009
Main Diseases for Hospitalization in Geriatric Ward; Kyorin University  n=350
Emergent case 80%, Dementia 70% of all cases

Average hospital stay: 30.0 days in emergent cases
Medical Center for Dementia Care

日本政府批准了172家医院作为痴呆紧急护理的核心医疗站点（2012）

- **Aim**: Sensory investigation for Quality Control
- **Object**: 172 centers
- **Period**: Oct 2012 ~ Dec 2012
- **N of Response**: 118
- **Respond Rate**: 68.6%

Awata, Toba et al unpublished data
Relative frequencies of causative cognitive disorders in hospitalized patients (n=11979, in 113 Medical Centers for Dementia Care)

- Alzheimer’s Disease
- MCI
- AACD
- AD with CVD
- VD
- DLB
- FTD
- Others

Awata, Toba et al unpublished data
Percentage of patients who are discharged within 2 month from the hospitals with medical center for dementia.

Longer Stay in Mental hospital (Big Challenge)

Hospital Stay Within 2 month: General: 71.9%, Mental: 31.0%

Significantly shorter in General hospital than that of Mental Hospital (P<0.001)
Solution

#1 Model of Medical Center of Dementia Care

#2 Education
Center for Comprehensive Care and Research on Memory Disorders (C3RMD)

- Family Class
- CGA
- Cog Tests
- Clinic
- Clinic
- Clinic
- Lobby
- Staff Area
- Fall Prevention Clinic
- NIRS EMG
- Medical Respite Ward
- Cooperation with community care
- Dementia Ward for Acute diseases
  - 30 Beds
Causes for Hospitalization in Dementia Ward at NCGG

Pneumonia
Dehydration
Gastrointestinal
Appetite loss
CVD
Fx
RF
CHF
DN
Urological
Skin
UTI
Anemia
Gait problem
Convulsion
PEG
Psy
Exam
BPSD
others

Average hospital stay: 27.5 days
Medical Staff

Front Desk

Clinic 診察室
Mental Exam Room
MSW and PSW room

Case Conference
Multidisciplinary Approach to Aspiration Pneumonia Standard in NCGG

1) Head Up using Bed Tilt
2) Oral Health Care
   With Dentist, Nurse and Care giver
3) Dysphagia Rehabilitation
   With ST and Nurse
4) ACE-inhibitor, Amantadine, Capsaicin, Cilostazol
5) Hydration, Nutritional therapy
6) Keep Conscious Level Alert
   Stop medication such as hyponotics and tranquilizer
   Led by Geriatrician
### Outcome of inpatients admitted in Center for Comprehensive Care and Research on Memory Disorders (NCGG)

<table>
<thead>
<tr>
<th>Admission From</th>
<th>Discharge To</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Admission</td>
</tr>
<tr>
<td></td>
<td>% of Total</td>
</tr>
<tr>
<td>Home</td>
<td>241 (62.3)</td>
</tr>
<tr>
<td>Institution for LTC</td>
<td>134 (34.6)</td>
</tr>
<tr>
<td>Cooperative mental Hosp</td>
<td>6 (1.5)</td>
</tr>
<tr>
<td>Other Hospitals</td>
<td>6 (1.5)</td>
</tr>
<tr>
<td>Dead</td>
<td>-</td>
</tr>
<tr>
<td>In the Hospital, C3RMD</td>
<td>-</td>
</tr>
<tr>
<td>total</td>
<td>387</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Diagnosis</th>
</tr>
</thead>
</table>
| AD
| DLB
| FTD
| VD
| NPH
| 診断未
| その他（精神疾患など）
| BPSD陽性例での認知症原因疾患はDLBの比率が高い |

- **MMSE**: $19 \pm 6.8$
- **Barthel Index**: $47 \pm 33$

**Mean hospital day**: 27.5
Changes in severity of BPSD measured by Cohen-Mansfield Agitation Inventory; CMAI
In NCGG hospital

CMAI得点

Total: Admission vs. Discharge
Aggressive: Admission vs. Discharge
Non-Aggressive: Admission vs. Discharge

p=0.0036
p=0.028
p=0.017

BPSD: Behavioral and Psychological Symptoms of Dementia
National Center for Geriatrics and Gerontology
Promote physical as well as mental independence in the elderly

**Challenges**

- Dementia

**Clinical Research**
- CCCRMD
- 1000 new cases in year
- Early detection by IADL
- Mental test using iPad
- Music Therapy

**Education**
- GP Class
- Nurse Class
- Family Class
- MR Class
- Town meeting

**Originate a policy**
- Contribute to
- Establish a new Policy for dementia

**NCGG**
- ↓ GP class 6/year
- “Support Dr for dementia” (n=1700)
- ↓
- They teach Doctors in their town (25000 in total)
Review of GP class

Treatment of BPSD

Community Care
Acute Care For geriatric conditions
Dementia In place
Differential Diagnosis
Support Doctor (Finished concentrated Class)

Longevity
↓ Support Doctor training 6 years
Support Doctor (2500)
↓
Primary care doctor
Training for responsive care (28000)
Summary

1) Dementia patients were increased up to 14% of whole elderly population

2) 50% of ambulance car was used for elderly (At leased 7% of ambulance car was used for dementia patients)

3) Most frequent cause of hospitalization is aspiration pneumonia.
Summary

4) Annually more than 100000 PEG was introduced for dementia with aspiration pneumonia.

5) Accumulated evidences were available for multidisciplinary care for aspiration

6) Comprehensive geriatric care for dementia Improved BPSD and acute somatic diseases, without prolonged hospitalization
Conclusion

For Acute care for persons with dementia, Geriatrician’s initiative for multi-disciplinary Dementia care is essential and the ultimate solution.