Summary of the questionnaire survey regarding upper GI cancer and endoscopy worldwide

Mitsuhiro Fujishiro
Chairman of Upper GI Cancer Committee, WEO
Department of Endoscopy and Endoscopic Surgery, The University of Tokyo, Tokyo, Japan
Incidence (ASR) of esophageal cancers in both sexes
Mortality (ASR) of esophageal cancers in both sexes

Source: GLOBOCAN 2012 (IARC)
Ratio of esophageal SCC / Adenocarcinoma

Red: SCC < Adenocarci.
Incidence (ASR) of stomach cancers in both sexes

Source: GLOBOCAN 2012 (IARC)
Mortality (ASR) of stomach cancers in both sexes

Source: GLOBOCAN 2012 (IARC)
Population based organized screening

- Esophageal cancer
- Stomach cancer
- Both
- Non
Opportunistic endoscopic screening of upper GI cancer
Spread of high definition endoscope

- Academic center
- Community hospital
- Primary clinic or hospital
High definition endoscope for detection of upper GI cancer
High definition endoscope for characterization of upper GI cancer

- Mandatory
- Desirable
- Optional
Transnasal endoscope for upper GI cancer screening
Magnifying endoscope for characterization of upper GI cancer
Spread of equipment-based IEE

- Academic center
- Community hospital
- Primary clinic or hospital
Equipment-based IEE for detection of esophageal SCC
Equipment-based IEE for detection of Barrett cancer
Equipment-based IEE for detection of gastric cancer
Equipment-based IEE for characterization of esophageal SCC
Equipment-based IEE for characterization of Barrett cancer
Equipment-based IEE for characterization of gastric cancer
Iodine staining in the esophagus

- Unavailable
- For suspicious lesion
- High risk group
Chromoendoscopy in the Barrett esophagus
Chromoendoscopy in the stomach
Sedation for detail upper GI endoscopy
Mucolytic agents

- Dimethicone
- Pronase
- N-acetylcysteine

- Dimethicone and pronase
- Dimethicone and N-acetylcysteine
- Dimethicone
- Unavailable
How to take photos and minimal shots in upper GI cancer screening
Numbers of minimal shots in upper GI cancer screening

- **Esophagus:** 2
  - Stomach: 4
  - Duodenum: 2

- **Esophagus:** 2
  - Stomach: 4
  - Duodenum: 2

- **Esophagus:** 1
  - Stomach: 3
  - Duodenum: 2

- **Esophagus:** 3
  - Stomach: 6
  - Duodenum: 3

- **Esophagus:** 2
  - Stomach: 4
  - Duodenum: 2

- **Esophagus:** 2
  - Stomach: 4
  - Duodenum: 2

- **Esophagus:** 5
  - Stomach: 20
  - Duodenum: 3

- **Esophagus:** 4
  - Stomach: 8
  - Duodenum: 4

- **Esophagus:** 5
  - Stomach: 30
  - Duodenum: 3

- **Esophagus:** 6
  - Stomach: 18
  - Duodenum: 4

- **Esophagus:** 4
  - Stomach: 6
  - Duodenum: 5

- **Esophagus:** 2
  - Stomach: 4
  - Duodenum: 2

- **Esophagus:** 8
  - Stomach: 22
  - Duodenum: 8
How to document in upper GI cancer screening

- Depending on doctors
- Nearly generalized
- Strict regulation
Use of quality indicators in upper GI cancer screening
Description of examination time in upper GI endoscopy

- Nearly none
- Depending on doctors
- Nearly generalized
- Strict regulation
Accepted examination time (minutes)

- 10 - 20
- 3 - 15
- 10 - 15
- 5 - 20
- 5 - 15
- 20 - 25
- 20 - 60
- 6 - 12
- 6 - 30
- 3 - 14
- 3 - 15
- 5 - 10
- 10 - 15
- 5 - 10
- 4 - 6
- 5 - 10
- 5 - 45
- 5 - 15
- 2 - 5
- 2 - 4
- 6 - 10
- 10 - 30
- 5 - 10
- 10 - 15
- 5 - 10
- 4 - 14
- 3 - 30
- 12
- 4 - 10
- 10 - 20
Application of Seattle protocol in Barrett surveillance

- Nearly none
- Depending on doctors
- Nearly generalized
- Strict regulation
Application of Sydney system in stomach surveillance

- Nearly none
- Depending on doctors
- Nearly generalized
- Strict regulation
Application of MAPS guidelines in stomach surveillance

- Nearly none
- Depending on doctors
- Nearly generalized
- Strict regulation
Target of application of Sydney system in stomach surveillance

- Nearly all subjects
- Subjects with H. pylori related diseases
- Subjects with other diseases (atrophy/IM)

IM: intestinal metaplasia
<table>
<thead>
<tr>
<th>Fee for upper GI screening endoscopy (US dollars)</th>
</tr>
</thead>
<tbody>
<tr>
<td>150–250</td>
</tr>
<tr>
<td>100–500</td>
</tr>
<tr>
<td>40–60</td>
</tr>
<tr>
<td>300–400</td>
</tr>
<tr>
<td>1.5–100</td>
</tr>
<tr>
<td>150</td>
</tr>
<tr>
<td>70</td>
</tr>
<tr>
<td>0–80</td>
</tr>
<tr>
<td>30–70</td>
</tr>
<tr>
<td>300–400</td>
</tr>
<tr>
<td>40–60</td>
</tr>
<tr>
<td>150</td>
</tr>
<tr>
<td>500</td>
</tr>
<tr>
<td>100</td>
</tr>
<tr>
<td>500</td>
</tr>
<tr>
<td>100</td>
</tr>
<tr>
<td>60</td>
</tr>
<tr>
<td>110</td>
</tr>
<tr>
<td>150</td>
</tr>
<tr>
<td>60</td>
</tr>
<tr>
<td>100</td>
</tr>
<tr>
<td>60</td>
</tr>
<tr>
<td>0–80</td>
</tr>
<tr>
<td>30–70</td>
</tr>
<tr>
<td>0–500</td>
</tr>
<tr>
<td>100</td>
</tr>
<tr>
<td>500</td>
</tr>
<tr>
<td>100</td>
</tr>
<tr>
<td>500</td>
</tr>
<tr>
<td>150</td>
</tr>
<tr>
<td>500</td>
</tr>
<tr>
<td>100</td>
</tr>
<tr>
<td>500</td>
</tr>
<tr>
<td>100</td>
</tr>
<tr>
<td>60</td>
</tr>
<tr>
<td>50</td>
</tr>
<tr>
<td>10–200</td>
</tr>
<tr>
<td>100</td>
</tr>
<tr>
<td>100</td>
</tr>
<tr>
<td>500</td>
</tr>
<tr>
<td>100</td>
</tr>
<tr>
<td>50</td>
</tr>
</tbody>
</table>
Quality requirements of doctors for upper GI endoscope

- No rule (all doctors)
- GI physician only
- Both GI physician and surgeon
- Endoscopy specialists
Endoscopic reprocessing

- Manual plus machine
- Manual only
Acknowledgment for contributors

- Australia (William Tam)
- Brazil (Luis Masuo Maruta, Julio Pereira Lima, Edson Ide, Lix Alfredo Reis De Oliveira, Raul Angelo Balbinot)
- Cameroun (Njouonkou mouchili Patrick Christian)
- Chile (Carlos Rueda)
- Beijing, China (Enqiang Linghu)
- Hong Kong, China (Anthony Teoh, Philip Chiu)
- France (Benamouzig Robert)
- India (Siddharth Srivastava, Mool Raj Kotwal, Arulprakash, I Naresh Kumar, Asif Iqbal, Anup Baro, Rajdeep Singh, Suneel Chakravarty)
- Indonesia (Kaka Renaldi, Ahmad Fariz Malvi Zamzam Zein, Zulfan Harahap)
- Iran (Tavassoli)
- Iraq (Odeesh)
- Japan (Kazuki Sumiyama, Naomi Kakushima, Kenichi Goda, anonymous)
- Jordan (Waseem Hamoudi)
- Lativia (Eduards Krustins)
- Lebanon (George Cortas)
- Mexico (Brenda Angelica Martell Campos, Alberth Mena Contreras)
- Nepal (Rakesh Kumar Jha)
- Pakistan (Aamir Ghafoor Khan, Imran Javed, Asif, Abdul Aziz Sahito)
- Peru (Arcana)
- Philippines (Edgardo M. Bondoc, Mark Anthony A. De Lusong)
- Russia (Konstantin)
- Singapore (Yeoh Khay Guan, Christopher Khor)
- South Korea (Gwang Ha Kim, Myung-Gyu Choi)
- Sudan (Nagwa Mansour Gamer)
- Turkmenistan (Nurmurat)
- UK (Adolfo Para-Blanco)
- Ukraine (Dovbenko Oleg, Oleksandr)
- Arizona, USA (Douglas Faigel)
- Florida, USA (Peter Draganov)
- Yemen (Omer Salem Balfaqih)