

LiSS system, the Japan's first non-medical private sector for death investigation

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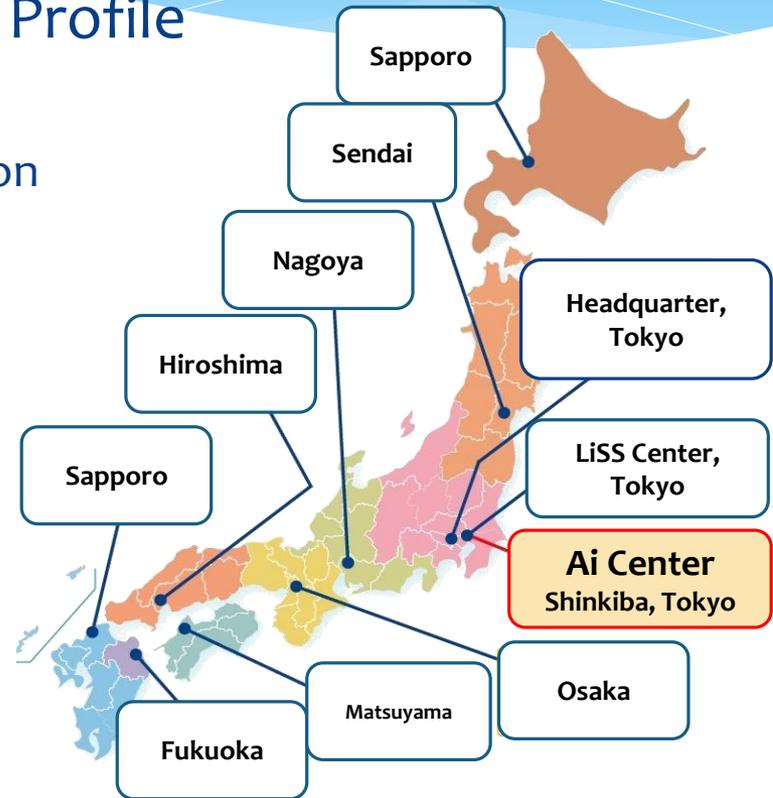
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Introduction

Company Profile

- * Name: **NPO LiSS System**
 - * NPO stands for non-profit organization
 - * LiSS stands for **Life Support System**
 - * Founded in Tokyo in 1993
- * Locations
 - * Headquarter: Central Tokyo
 - * LiSS Center: Shinkiba, Tokyo
 - * **Ai Center Shinkiba: Shinkiba, Tokyo**
 - * Branches: 8 branches
- * Number of the employees
 - * 75 employees
- * Services
 - * provides “End of life care” for the clients
- * Number of the clients
 - * 3,500



HQ and branches

Introducing the presenter

Prof. Morio Iino

Tottori University, Yonago, Japan

- * Board Certified Forensic Pathologist
- * founding member of the ISFRI
- * Associate Editor of JOFRI
- * Board member of the Japanese Society of Autopsy imaging (Ai)
- * Councilor of the Japanese Society of Legal Medicine
- * Consultant pathologist for the NPO LiSS System

Experiences in postmortem imaging

- * Attended 1st Virtopsy Basic Course in 2006
- * Attended 1st Virtopsy Advanced Course in 2010
- * Overseas fellow at VIFM, Australia in 2008-2009
 - * Supervisor: Dr. Chris O'Donnell
- * Installed CT scanner to Osaka University in 2010



VBC 2006



VBC 2006



VIFM, Australia in 2009

Introduction of the LiSS System

* Background

- * Family relationships in Japan have drastically changed over the past 20-30 years.
- * Since the late 1980's, some people would not rest in a traditional family grave since their children would not be able to preserve it.
- * As a solution, Mr. Nyokai Matsushima, a former Buddhist monk, made a form of shared grave called "Moyai Monument" in Tokyo in 1990.
- * Next issue was who takes care of funerals besides their families.
- * The answer is... yourself.
 - * The funeral planned and done by the deceased is needed.



Nyokai Matsushima, a founder of LiSS System



Moyai Monument, the shared grave

Introduction

- * The issues for funerals being done by the deceased
 - * Legal issues
 - * Solved by giving the deceased person “Supposed Human Rights”.
- * The beginning of the LiSS System
 - * End-of-life care
 - * division of estate
 - * funeral service
 - * solving any legal issues after death
- * Death is inevitable
 - * Try to know “when” and “under what circumstances” the event has to take place
 - * To ask cause of death of the deceased to the doctors was unacceptable in 1990’s since it seems to be doubting the medical treatment
 - * The answer is “Autopsy imaging” , the technique of postmortem imaging

Introduction

- * Establishment of Ai Center

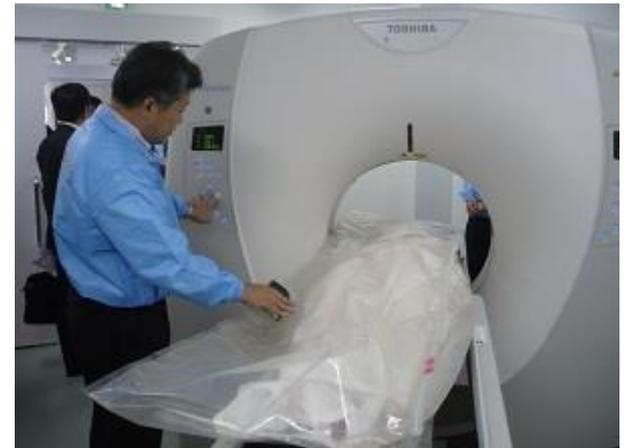
- * Installing CT scanner at the corner of LiSS Center to provide a service for death investigation in April, 2014
- * Opens 24/7

- * Equipment

- * CT scanner: Aquillion 16 (Toshiba, Japan)
- * Workstation: Syngo via (Siemens, Germany)
- * Cloud server: eSite HEALTHCARE

- * Staff

- * One full-time organizer
- * One full-time radiographer
- * Other LiSS staffs for help



Toshiba CT scanner at Ai Center

- * Interpretation of the images (tele-radiology)

- * Referral radiologists and pathologists can interpret the images online

Medical Malpractice investigation

- * In October, 2015, the government remodeled the act to enforce a medical malpractice checking system.
- * When a patient unexpectedly dies during/after the medical treatment , the hospital has to report the case to the investigation center and investigate the cause/manner of death by themselves.
- * In this system, they do not have to perform autopsy for death investigation.
 - * The postmortem imaging is a useful method for investigation.
 - * Ai Center of the LiSS System received attention from Tokyo Medical Association which helps solving issues of malpractice.

Ai lecture series

- * To start the postmortem imaging services, LiSS System had a lecture series to educate our staff and other interested parties.
- * In September, 2015, they had a 2-day course for Ai education.
- * One of the lecturers was Prof. Morio Iino, Tottori University.

Time table for the course

| Day 1 | Day 2 |
|--|---|
| Autopsy imaging and autopsy | What is Ai? |
| Summary of Medical malpractice checking system 1 | Basic concept of post mortem scanning |
| Summary of Medical malpractice checking system 2 | <u>Autopsy imaging in forensic medicine</u> |
| Infection prevention in transporting bodies | Medical safety management at the hospital |
| Legal issues of Autopsy imaging | How to treat the bodies 1 |
| | How to treat the bodies 2 |

Academic part of the LiSS System

- * The LiSS System is not only a non profit organization.
- * It has an academic part to absorb the latest information on death investigation.
- * Mr. Matsushima makes every effort to understand the advanced way of death investigation.



Mr. Matsushima in *Samue*, a traditional Japanese style

Tours overseas to gain knowledge

* Tour in Australia in March, 2016



Visiting VIFM



A lecture at VIFM



Beautiful scenery in Melbourne



Visiting funeral service company



A crematorium

Tours overseas to gain knowledge

- * Tour in Amsterdam for ISFRI in May, 2016



Mr. Matsushima with Prof. Grabherr after attending the PMCTA workshop



Having Dutch beer



Lecture series in Japan

Inviting forensic researchers to LiSS System

- * Prof. Silke Grabherr
 - * Talk on MPMCTA (June, 2016)
- * Dr. Kurt Nolte
 - * Free discussion on death investigation in the US (March, 2017)
- * Dr. Valentinus Yudi
 - * Talk on funeral service in Indonesia (November, 2016)



Sponsored the congress dinner

forensic pathology and science symposium in
Nagasaki (November, 2016)

Guest speakers: Prof. Dr. Hermann Vogel, Dr. Chris O'Donnell, Dr. Lars Ebert,
Dr. Sookyong Lee, Dr. Hideki Hyodoh



**Guest speakers at the
congress in Nagasaki
November, 2016**

Installing the Virtangio

- * Mr. Matsushima of the LiSS System would not stop seeking new successes in postmortem imaging.
- * LiSS System decided to purchase the Virtangio for better understanding the cause of death of their clients.
- * It was not easy to import the very first postmortem angiography device all the way from Europe.



Mr. Dominguez and Mr. Ozawa, a radiographer

Delivering the Virtangio

- * LiSS System does not have many cases since they are not a medical or forensic institute.
- * Another new idea came to Mr. Matsushima.
Delivering the Virtangio!
- * They would deliver the Virtangio anywhere in Japan along with an embalmer and a radiographer .
 - * We delivered the machine to Prof. Hasegawa's lab in Yokosuka



Ms. Imagawa, an embalmer has been trained how to insert the catheter.



delivery van for Virtangio

Summary

- * LiSS Sytem is an NPO which provides end-of-life care services.
- * It provides postmortem CT scanning service.
- * It is the first death investigation service done by non-medical private sector in Japan.
- * It now provides MPMCTA service as well after the hard way of importing Virtangio device from Switzerland.

- * Prof. Iino, a consultant forensic pathologist is a well trained pathologist who has much experience in postmortem imaging and he can give them a support in scanning and interpreting the images.
- * LiSS System can work with Prof. Iino as a team in studying MPMCTA cases in Japan.

- * We'd like to join the TWGPAM (Technical Working Group Post mortem Angiography Methods)



Thank you!



Thank you!