Department of Emergency Medicine

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General Summary

- 1. Education system for junior residents in emergency medicine
- 2. Establishing a database of severe traumatic brain injuries in Japan
- 3. The etiology of syncope
- 4. Research on laboratory assessment of myocardial infarction in the emergency room
- 5. Managing a course on immediate cardiac life support (ICLS)
- 6. Managing the Japan Advanced Trauma Evaluation and Care (JATEC) course
- 7. Providing logistical support to the Japan Boxing Commission
- 8. Basic research on traumatic brain injury
- 9. Basic and clinical research on oxidative stress and emergency medicine
- 10. Advice to local authorities on plans for disaster medicine
- 11. Creation of a Disaster Medical Assistance Team (DMAT) deployment system
- 12. Management of a hospital emergency response drill, including "code blue" ("stat call") and the rapid response system (RRS)
- 13. Managing the Jikei Airway Management course for patient safety (JAMP) course
- 14. Providing logical support for the Japan AED Foundation

Research Activities

1. Supervision and development of ultrasound devices for the diagnosis and treatment of cerebrovascular disorders

2. Director of the Japan Neurotrauma Data Bank Committee

3. Prognostic value of heart fatty acid-binding protein for patients with chest symptoms in the emergency room

4. Research committee on higher cerebral function after traumatic brain injury

5. Research committee on impact biomechanics in automobile accidents (Society of Automotive Engineers of Japan

6. Published a revised edition of *Guidelines for the Treatment and Management of Severe Head Injury* (The Japan Society of Neurotraumatology)

- 7. Research group on cerebrospinal fluid in cases of traumatic intracranial hypotension
- 8. Basic research on traumatic brain injury and oxidative stress
- 9. Basic research on heat stroke and neuronal injury
- 10. Development of anti-free-radical therapy in patients with acute neuronal conditions

11. Development of educational system in emergency medicine, including the use of simulation training

Publications

Takeda S. "AED mapping and application to community in Japan" in a part of the workshop "CPR and AED education in community". *Jeju National University Journal.* 2019 December; 1–12.

Kamioka H, Mori Y, Nagata K, Iwanaga S, Uzura M, Yamaguchi S. Relationship of daily hot water bathing at home and hot water spa bathing with underlying diseases in middle-aged and elderly ambulatory patients: A Japanese multicenter cross-sectional study. *Complement Ther Med.* 2019 Apr; **43**: 232-239. doi: 10.1016/j.ctim.2019.02.003. Epub 2019 Feb 10. PMID: 30935536.

Suzuki K, Komukai K, Nakata K, Kang R, Oi Y, Muto E, Kashiwagi Y, Tominaga M, Miyanaga S, Ishikawa T, Okuno K, Uzura M, Yoshimura M. The Usefulness and Limitations of Point-of-care Cardiac Troponin Measurement in the Emergency Department. *Intern Med.* 2018 Jun 15; **57**(12): 1673-1680. doi: 10.2169/internalmedicine.0098-17. Epub 2018 Feb 9. PMID: 29434124; PMCID: PMC6047987.

Mitsunaga T, Hasegawa I, Uzura M, Okuno K, Otani K, Ohtaki Y, Sekine A, Takeda S. Comparison of the National Early Warning Score (NEWS) and the Modified Early Warning Score (MEWS) for predicting admission and in-hospital mortality in elderly patients in the pre-hospital setting and in the emergency department. *PeerJ.* 2019 May 16; **7:** e6947. doi: 10.7717/peerj.6947. PMID: 31143553; PMCID: PMC6526008.