# Qualification System for Trauma Experts in Japan

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Former\* and Present\*\* Chairman of the Executive Board
On behalf of members of

the Japanese Association for the Surgery of Trauma May 2025 This slide description is dedicated to the memory of professor

David Vincent Feliciano

## The Japanese Association for Surgery of Trauma (JAST)



- JAST is the association mainly for medical doctors, and has been working to help Japanese citizens maintain good health and save their lives while contributing to the progress and development of traumatology and the related fields by collecting, providing, and exchanging information on traumatology.
- It was established in 1986.
- There are about 2,000 members.

#### Main Activities of JAST



Since establishment, we are engaged in a variety of committee activities as follows.

- hosting annual academic conferences and general meetings
- issuing web-based the Journal of the Japanese Association for Surgery of
   Trauma
- planning and modifying organ injury classifications
- designing and promoting Japan Trauma Data Bank (JTDB)
- supporting multi-institutional researches
- editing and revising Japan Advanced Trauma Evaluation and Care (JATEC)
   guidelines and Japan Expert Trauma Evaluation and Care (JETEC) guidelines
   coupling with their training courses
- maintaining a trauma expert certification system
- keeping international relationship with Korea, India, etc

#### Development of Trauma Experts & Competency Goals



JAST Trauma experts is defined as a subspecialty categorized physician who takes a leadership role in the management of severe trauma and handles a variety of basic category specialists, mainly emergency physicians, several surgical specialists and etc.

Trauma experts must acquire the following 4 competencies:

- 1) Competency for decision making
- 2) performance of advanced techniques necessary for resuscitation
- 3) Competency for team coordination
- 4) Competency for total management.

In addition, acquisition of the latest knowledge and techniques, and maintenance of the 4 competencies are necessary.

254 trauma experts and 108 training facilities have been certified by JAST (2024)

#### Competencies for Decision Making



- ➤ Knowledge of management strategies from lifesaving to returning to society, and acquisition of practical ability for the decision making are required.
- > Understanding of necessary resuscitation methodologies are essential.
- For example, treatment strategies include judgment on operative and non-operative management, selection of definitive or damage control surgery, and decision on the order of **priority** of managements.
- To achieve the optimum functional outcome, a strategy to return to society, including rehabilitation from the acute phase, is also important.

### Performances of Advanced Techniques Necessary for Resuscitation



- Regarding advanced techniques necessary for resuscitation, the ability to perform cricothyroidotomy for patients required difficult airway management.
- Regarding techniques for abnormal circulation, the ability to rapidly perform pericardiocentesis and pericardial window to apply cardiac tamponade, the ability to perform resuscitation aortic blockage with REBOA, and resuscitative thoracotomy are necessary.
- Furthermore, hemostasis must be rapidly carried out as a part of resuscitation. The hemostasis method selected depends on the status of patients. Damage control strategies are selected for many unstable cases to prevent the lethal triad of trauma. The ability to perform damage control resuscitation is required, including implementation of massive transfusion protocol and abbreviated surgery. In addition, prevention of hypothermia is important throughout the process.
- For life-threatening traumatic brain injury, appropriate management of the intracranial pressure and body temperature is needed.

#### Competencies for Team Coordination



- > Trauma managements require team approach, and effective teamwork improves the outcome of severe trauma patients.
- For trauma managements, many decisions must made under uncertain conditions.
- For teamwork building under such conditions, 'clarification of the treatment goal and strategy', 'team leadership', and 'clear and effective communication' are important.
- As a team leader, a trauma expert need to have team coordination abilities to improve teamwork by establishing a chain of command and assigning the members to appropriate positions.

#### Competencies for Total Management

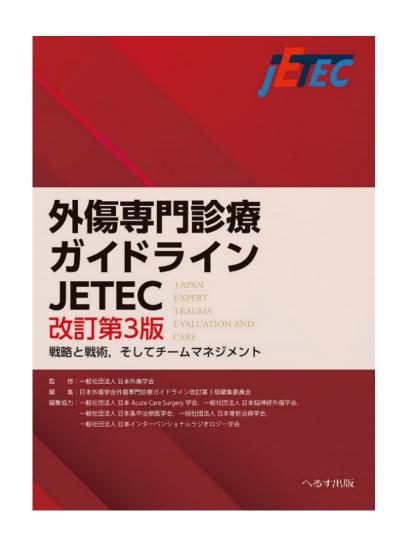


- The ability of total management via cooperation is also an important requirement of trauma experts.
- To ensure lifesaving of trauma patients and returning to society, the chain of trauma care from prehospital care to initial management, definitive treatment, intensive care, and rehabilitation must be seamlessly provided under leadership of trauma experts.

#### JETEC – Japan Expert Trauma Evaluation and Care



- Japanese Expert Trauma Clinical Guidelines
- Trauma Care System Theory
- Team-Based Approach
- Trauma Treatment Strategies and Tactics
- Acute-Phase Rehabilitation and Social Reintegration Strategies
- Off-the-Job Training



### Trauma Care Training in Japan

- **JATEC**<sup>TM</sup> (ATLS equivalent)
  - Training for physicians about in-hospital trauma care
- JPTEC<sup>TM</sup> (Pre-hospital TLC)
  - Training for emergency technicians about prehospital care
- JNTEC<sup>TM</sup>
  - Training for Nurses
- JETEC<sup>TM</sup>
  - Training for development of trauma experts

## Concept & Overview of JETEC



- Japan Expert Trauma Evaluation and Care

  (JETEC) is the original training system made by

  JAST for qualified trauma experts and their

  candidates providing a guideline textbook,

  training courses.
  - -24 participants = Four groups (A,B,C,D) of 6 trainees
  - Four times in a year
  - Contents will be updated gradually



#### Time Schedule of JETEC course

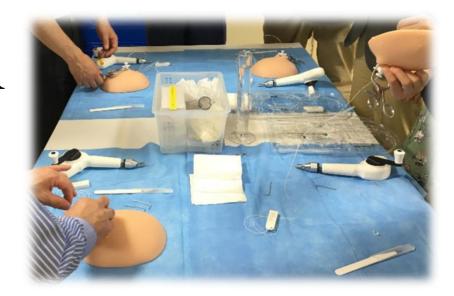


Time	min			Contens	
9:00 - 9:10	10	Introduction			
9:10 - 9:40	30	Overview of damage control strategy and tactics (lecture & interactive discussion)			
9:40 - 10:30	40	Team approach and management (lecture & interactive discussion)			
	10	Break			
		Head Trauma	Small group interactiv Orthopedic trauma	e lectures & Hands-on sessio Trauma IVR (REBOA)	ons Torso trauma
10:40 -11:40	60	A	В	C	D
	5	Small break			
11:45 - 12:45	60	В	C	D	A
	30	Lunch time			
13:15 - 14:15	40	C	D	A	В
	5	Small break			
14:20 -	60	D	$\mathbf{A}$	В	C
	10	Break			
15:30 -16:20	60	Work shop for de	ecision making (Blunt n	nulti-system injury)	
	5	Small break			ILIEC
16:25 -17:15	60	Work shop for decision making (multi-casualty incident of stab wounds)			
17:15 -17:30	30	<b>Closing ceremon</b>	y		

### Hands-on trainings on JETEC Course



A





В





## Perspective of New Curriculum for JAST trauma expert

#### > Case Experiences

- ✓ Essential items 14: Initial management 5, Critical care 8, Rehabilitation 1.
- ✓ Desirable items 10: Initial management 8, Critical care 2.
  - 8 Desirable items are required, however 3 of them can be changeable by optional items
- ✓ Optional items 11: Initial management 3, Critical care 8.

#### Clinical Skills

- ✓ Essential items 21.
- ✓ Desirable items 19.
  - 16 Desirable items are required, however shortage of them can be changeable by optional items
- ✓ Optional items 26

#### > Off-the-job training

- ✓ **JATEC**/ATLS course, **JETEC** course and AIS coding lectures are essential.
- ✓ At least one course from 10 desirable courses is required.

#### Future Perspective of JAST



- ➤ Revision of JETEC through the Development of an Evidence-Based Japanese Trauma Guideline
- ➤ Development of a Decision-Making Simulation for Advanced Trauma Treatment Based on JETEC
- ➤ Trauma Care Level Improvement Program through the Trauma Facility Accreditation System

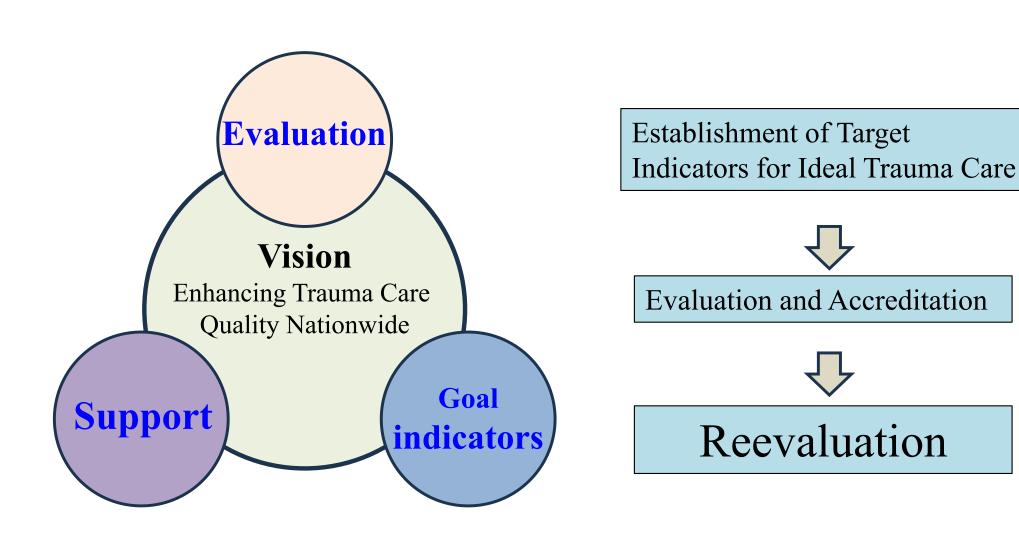
#### Trauma Facility Evaluation System



- Creation of Quality Assessment Indicators (Achievement Indicators)
- Aiming to evaluate trauma care facilities in Japan (current status assessment and improvement)
- Facilities that meet certain standards in quality evaluation shall be reviewed and accredited by the Society

### Trauma Facility Evaluation System





## Quality Evaluation Indicators – Four Main Categories



- 1. Assessment of Trauma Care System
- 2. Evaluation of Trauma Care Quality in JTDB and Other Databases
- 3. Evaluation of Community Contribution in Trauma Care
- 4. Assessment of Self-Evaluation Practices
- Indicators were developed in consultation with the Ministry of Health, Labour and Welfare
- These are the first items presented by the Society that outline the requirements for trauma care facilities in Japan