
海外招請講演

[IL(E)13] 海外招請講演13

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Sat. Mar 2, 2019 10:35 AM - 11:25 AM 第2会場 (国立京都国際会館2F Room A)

[IL(E)13]High sensitivity cardiac troponin assays: How they are being used across the world for the evaluation of patients with suspected acute coronary syndromes — Possible implications for Japan

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【同時通訳付き】

EDUCATION:

Michael Power High School1961 - 1966

Toronto, Ontario

Senior Matriculation (Grade 13)

University of Toronto1966 - 1968

Pre-Medicine

Toronto, Ontario, Canada

University of Toronto1968 - 1972

Medical School

Medical Doctor

Toronto, Ontario, Canada

Executive MBA Program1988 - 1990

Michigan State University

Business School

Broad Graduate School of Management

East Lansing, Michigan

Masters Business Administration

Member, Beta Gamma Sigma

GRADUATE TRAINING:

Montreal General Hospital1972 - 1973

Montreal, Quebec

Straight Medicine

Research Fellow1974 - 1975

Clinical Science Division
University of Toronto

LICENSURE AND CERTIFICATION:

National Board of Medicine Examinations 1972

College of Physicians and Surgeons of Ontario 1972 - 1976
1985 - 2013

California State Medical Licensure 1973 - present

Michigan State Medical Licensure 1975 - present

Diplomate of the American Board of Emergency Medicine 1981 - 1991

Recertification - American Board of Emergency Medicine 1991 - 2001
2001 - 2011
2011 - 2021

Fellow, American College of Emergency Physician 1982 - present

Fellow, American Academy of Emergency Medicine 2000 - present

HOSPITAL AND STAFF APPOINTMENTS:

Staff Physician 1973 - 1974
Emergency Department
Belleville General Hospital
Belleville, Ontario

Staff Physician 1974 - 1975
(East York Medical Emergency Group)
Emergency Department
Toronto East General Hospital
Toronto, Ontario

Senior Staff 1975 - present
Division/Department of Emergency Medicine
Henry Ford Hospital
Detroit, Michigan

Associate Head 1981 - 1983

Division of Emergency Medicine
Henry Ford Hospital
Detroit, Michigan

Vice Chairperson 1983 - 1988
Department of Emergency Medicine
Henry Ford Hospital
Detroit, Michigan

Associate Staff 1989 - 1994
Emergency Medicine 2007 - present
Cottage Hospital
Grosse Pointe Farms, Michigan

Chairperson 1988 - 1992
Department of Emergency Medicine
Henry Ford Hospital
Detroit, Michigan

Vice Chairperson 1992 - 2006
Department of Emergency Medicine
Henry Ford Hospital
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Past Chairperson 2006 - present
Department of Emergency Medicine
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High sensitivity cardiac troponin (hs-cTn) assays (as defined by the International Federation of Clinical Chemists) since 2015 have been recommended by the European Society of Cardiology (ESC) for the rapid (very low baseline value or the use of a 1 hour delta threshold value algorithm) rule-out and rule-in of acute myocardial infarction (AMI) in selected patients (chest pain complaint, symptoms of We have very recently reported the results of a single center US trial (REACTION-US) assessing the use of the ESC recommended hs-cTnT (Roche Diagnostics) rapid 1 hour or less rule-out and rule-in AMI algorithm for all patients presenting with any suspicious symptoms. The rapid rule-out assessment results are very similar (high negative predicted values and sensitivities) but the rule-in assessments are significantly different with lower positive predictive values and specificities for AMI in the US when compared to the hs-cTnT algorithm currently used in Europe.

A large US multicenter study (HIGH U.S.) assessing the use of a hs-cTnI assay (Siemens Diagnostics) as recommended by the ESC published rapid assessment guidelines but enrolling all comers with symptoms suspicious for AMI has been recently completed. The initial results in this patient population with many risk factors for coronary artery disease show similarly very high negative predicted values and sensitivities but lower and inadequate positive predictive values for AMI when using the ESC guidelines for this specific assay.

Given the combination of the European and more limited US data available there is movement in the US to utilize hs-cTn assays for the rapid rule-out of AMI (approximately 50 centers have implemented this approach) and for safe discharge when combined with a risk-stratification tool. This strategy will provide more efficient care and will lower costs for the evaluation for all patients presenting to the ED with any symptoms suspicious for AMI while maintaining a rate of missed AMI of less than one percent of patients. The algorithms for the rapid rule-in of AMI with appropriately high positive predictive values and specificities are most likely going to be determined in individual medical centers.

In Japan the use of hs-cTn assays for the evaluation of all patients with any symptoms suspicious for AMI would be helpful in all grades (urgent, emergency and critical care) of Emergency Medical care. More specifically this strategy would provide accurate rapid rule-out assessments for AMI. Given the experiences in Europe and the US it may not be necessary to validate this approach in a multicenter Japanese study.