

petrosal segments of right internal carotid artery. The patient died of rapid hemodynamic collapse four hours after arriving at the Emergency Department.

Discussion: From the poor outcome of this critical case, we learned a significant lesson about managing this major trauma. Priorities of resuscitation and the current concepts of therapy were reviewed.

Keywords: carotid artery; head trauma; intracranial hemorrhage; motorcycles; pseudoaneurysm; skull fracture

Poster Session IV

Wednesday, 13 May, 14:00–15:00 hours

P-12

Strategy for Acute Myocardial Infarction Due To Obstruction of Left Main Trunk of the Left Coronary Artery

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Introduction: Recently various catheter interventions (i.e., percutaneous coronary angioplasty (PTCA), stent, etc.) have been used for the treatment of acute myocardial infarction (AMI). Using these interventions, the results of treatment for AMI have improved. However, AMI due to left main trunk of left coronary (LMT) artery often still is fatal.

Purpose: To investigate the factors to improve the treatment for cases with obstruction of the main left coronary artery.

Methods: We performed coronary artery bypass grafts (CABG) for 593 cases of ischemic heart disease between February 1982 and March 1998. Out of these cases, 74 cases (12.5%) had an AMI. Furthermore, 13 (17.6%) of the AMI cases had obstruction of the LMT. Preoperatively, 11 cases (84.6%) were Forrester Type IV. All of these cases required assistance with an intra-aortic balloon pump (IABP) preoperatively. Eight cases had intervention for and obstructed LMT; two cases had failed PTCA for other portion of the vessel.

Results: Early death occurred in six cases (Group D), and there were seven cases in the survival group (Group S). There was one case of right coronary artery (RCA) dominance in Group S. Except for this case, the time to catheter intervention from onset of AMI of Group S was shorter than for Group D. In the three cases in Group D in whom reperfusion of LMT could not be obtained, the time to operation from onset was >6 hours.

Conclusion: AMI cases due to LMT obstruction had catheter intervention performed within 2–3 hours from onset, if possible. After that, CABG was needed as early as possible after the patient was assisted by IABP. If intervention was unsuccessful, CABG was needed within four or five hours.

Keywords: acute myocardial infarction; angioplasty; arteries, coronary bypass, balloon pump, coronary bypass graft; intra-aortic; heart disease, ischemic

P-13

Association between Angiotensin Converting Enzyme Gene Polymorphism and Acute Coronary Syndrome in Taiwan

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Introduction: The angiotensin-converting enzyme (ACE) is responsible for the production of angiotensin-II and in the degradation of bradykinin, two important peptides involved in cardiovascular physiology. Plasma and cellular ACE levels in humans are influenced by an insertion (I)/deletion (D) polymorphism of the ACE gene, the ACE I/D polymorphism. Angiotensin converting enzyme gene polymorphism has been reported as a risk factor for the Acute Coronary Syndrome. The Acute Coronary Syndrome has become one of the top 10 causes of mortality in Taiwan. Hence, early diagnosis and prompt treatment are important issues for the emergency cardiovascular care.

Purpose: Since the relationship between ACE gene polymorphism and Acute Coronary Syndrome has not been reported in Taiwan, this study was directed at the analysis of the role of the ACE gene in cardiac diseases, particularly in emergency cases. Besides, early diagnosis of the Acute Coronary Syndrome presents a great challenge to emergency physicians because of the high mortality rate associated with this disease. The traditional serum cardiac markers including CK-MB, SOGT, and LDH may not achieve the goal of early diagnosis for minimizing the time to initiation of therapy. In this study, Troponin-T was used as a tool for the diagnosis of the Acute Coronary Syndrome, and its clinical roles in early diagnosis was studied.

Discussion: We believe that ACE gene polymorphism might be a significant risk factor for the Acute Coronary Syndrome in the Taiwanese population. Screening of the ACE gene polymorphism will become a significant aspect of Emergency Medicine in the near future.

Keywords: acute coronary syndrome; angiotensin converting enzyme; polymorphism; risk factors; Taiwan; troponin-T

P-14

The Pattern of Ambulance Arrivals in the Emergency Department of a General Hospital in Singapore — Is It Different from Walk-In Arrivals? What Is the Impact?

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Introduction: A patient brought into the Emergency