

## MP2-19

### Sudden death of patients with Kawasaki disease under school supervision in last 30 years

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**Objectives:** Although students with Kawasaki disease (KD) are quite common in Japan, fatal events due to KD seem to be decreasing. It is necessary for school caregivers to be informed about the current situations of KD in school.

**Method:** All reports including ECG, death or health certificates, and autopsy reports of all sudden cardiac death (SCD) registered to the mutual aid system for accidents under school supervision in Japan during 30 years between 1984 and 2013 were reviewed.

**Results:** Fourteen cases (0.79%) were enrolled from a total of 1768 sudden death. Graders were from 3rd in primary school to 12th in high school. Twelve were male students. Eleven cases occurred among 1299 (0.85%) SCD before 1999, and 3 cases did from among 469 SCD's (0.64%) after 2000. In 14 victims, 13 cases occurred during exercise, and one case that received coronary artery bypass graft surgery dies suddenly while sitting on a chair. Reports of 11 cases proved that they had coronary artery lesion (CAL) and/or myocardial infarction; some of them were revealed by autopsies. However, in 3 cases were not reported that they have CAL, one is diagnosed as acute heart failure, and 2 other cases were reported as arrhythmia after autopsies. Actually those 3 cases were not restricted acting any sports. Eight cases were restricted competitive or strenuous sports strictly. Concerning to KD, there has been no report of survivors who was resuscitated from SCA.

**Conclusions:** Before 1999, there was a possibility that the restriction of exercise was not observed strictly for students with CAL. Incidence of SCD due to CAL slightly decreased after 2000, however, students with past history of KD have possibility of out-of hospital cardiac arrest induced by life-threatening arrhythmia.