

Symptoms reported in calls to emergency medical services 24 hours prior to out-of-hospital cardiac arrest

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Background and purpose: It remains unknown whether patients with out-of-hospital cardiac arrest (OHCA) experience prodromal symptoms. We aimed to investigate symptoms reported by patients with OHCA contacting emergency medical services (EMS) within 24 hours prior to arrest.

Methods: We linked OHCA occurring from 2016 through 2018 to corresponding emergency calls occurring within 24 hours prior to arrest (defined as "pre-arrest calls"). These calls were included and evenly split and evaluated by authors.

Results: Among 4071 patients with OHCA, 481 patients (11.8%) had pre-arrest calls (59.9% males, median age 74 years) with a total of 539 calls. Figure 1 shows the reported symptoms across calls. The most commonly

reported symptoms were breathing problems (59.4%), confusion (23.0%), unconsciousness (20.2%), chest pain (19.5%) and paleness (19.1%). The most common co-occurring symptom pairs were breathing problems in combination with paleness (14.5%), confusion (14.1%), unconsciousness (13.5%), sweating (13.0%) and chest pain (11.9%), respectively. An urgent response was dispatched in 68.7% of calls containing breathing problems compared to 83.0% of calls containing chest pain.

Conclusion: Among patients with OHCA, 11.8% had a call to EMS within 24 hours prior to arrest and breathing problems was the most commonly reported symptom occurring in 59.4% of calls.

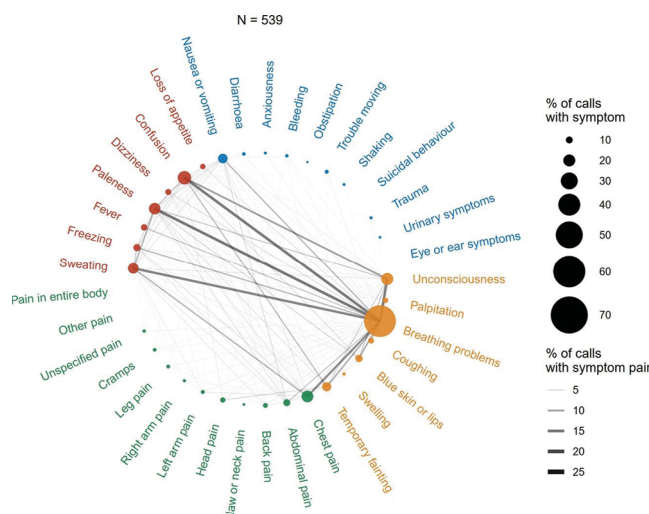


Figure 1