

# **Tilmelding af Foredrag**

# Foredragets titel

Out-of-hospital Cardiac Arrest from Foreign Body Airway Obstruction in Denmark – Incidence, Survival and Interventions

#### Forfatter(e)

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## Afdeling/praksis

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#### Uddannelsesniveau

Reservelæge, lægevikar

#### Introduktion

Foreign body airway obstruction (FBAO) stands as an important contributor to accidental fatalities, yet prompt bystander interventions have been shown to improve survival significantly. The objectives of this study were to assess the incidence, interventions, and survival of patients with out-of-hospital cardiac arrest (OHCA) from FBAO and to compare these with non-FBAO cardiac arrests in the general population of Denmark.

## Materiale/metode

This population-based cohort study included all out-of-hospital cardiac arrests in Denmark between 2016 and 2022 based on the Danish Cardiac Arrest Registry. All out-of-hospital cardiac arrests from FBAO were identified and coupled to the patient register. Descriptive statistics is applied along with multivariable analyses to identify predefined prognostic factors for survival and to characterize the foreign objects.

## Resultater

A total of 30,926 patients with OHCA arrest were included, and the incidence rate of cardiac arrest from FBAO was 0.78 per 100,000 person-years (95% CI 0.57 – 1.04). Upon arrival of the emergency medical services, return of spontaneous circulation was present in 24% of the FBAO cases. The 30-day survival was 30% within the FBAO population compared to 14% within the non-FBAO population. A total of 26% of the FBAO population had specific interventions performed by bystanders. This study did not prove a statistically significant association between bystander interventions or emergency medical service personnel interventions and survival, OR 1.21 (95 % CI 0.5 – 2.8) and OR 0.76 (95% CI 0.30 – 1.81), respectively. Meat, bread and candy was the most common objects.

### **Diskussion**

OHCA caused by FBAO is rare. A considerable proportion of patients with supposed out-of-hospital cardiac arrest from FBAO had return of spontaneous circulation upon arrival of the emergency medical services. This study did not prove any associations between survival and specific interventions performed by bystanders or emergency medical service personnel. These findings require further examination in future studies.

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