

Prescriptions of antidepressants and anxiolytics in survivors of out-of-hospital cardiac arrest

a nationwide register-based follow-up study

Bundgaard, Kristian; Sørensen, Kristian Dahl Kragholm; Mortensen, Rikke Nørmark; Hansen, Steen Møller; Torp-Pedersen, Christian; Rasmussen, Bodil Steen

Published in:

Scandinavian Journal of Trauma, Resuscitation and Emergency Medicine

DOI (link to publication from Publisher):

[10.1186/1757-7241-23-S1-A10](https://doi.org/10.1186/1757-7241-23-S1-A10)

Creative Commons License

CC BY 4.0

Publication date:

2015

Document Version

Publisher's PDF, also known as Version of record

[Link to publication from Aalborg University](#)

Citation for published version (APA):

Bundgaard, K., Sørensen, K. D. K., Mortensen, R. N., Hansen, S. M., Torp-Pedersen, C., & Rasmussen, B. S. (2015). Prescriptions of antidepressants and anxiolytics in survivors of out-of-hospital cardiac arrest: a nationwide register-based follow-up study. *Scandinavian Journal of Trauma, Resuscitation and Emergency Medicine*, 23(Suppl. 1), Article A10. <https://doi.org/10.1186/1757-7241-23-S1-A10>

General rights

Copyright and moral rights for the publications made accessible in the public portal are retained by the authors and/or other copyright owners and it is a condition of accessing publications that users recognise and abide by the legal requirements associated with these rights.

- Users may download and print one copy of any publication from the public portal for the purpose of private study or research.
- You may not further distribute the material or use it for any profit-making activity or commercial gain
- You may freely distribute the URL identifying the publication in the public portal -

Take down policy

If you believe that this document breaches copyright please contact us at vbn@aub.aau.dk providing details, and we will remove access to the work immediately and investigate your claim.

MEETING ABSTRACT

Open Access

Prescriptions of antidepressants and anxiolytics in survivors of out-of-hospital cardiac arrest - a nationwide register-based follow-up study

Kristian Bundgaard^{1,2*}, Kristian Kragholm¹, Rikke N Mortensen³, Steen M Hansen², Christian Torp-Pedersen², Bodil S Rasmussen¹

From 6th Danish Emergency Medicine Conference
Odense, Denmark. 20-21 November 2014

Background

The need for treatment with antidepressants and anxiolytics in survivors of out-of-hospital cardiac arrest (OHCA) is not known. Such use is an important part of evaluating neurological outcome in OHCA survivors and we have therefore performed a nationwide study.

Methods

Nationwide data on OHCA from the years 2001-2011 was available from the Danish Cardiac Arrest Registry. We linked data to the Danish National Prescription Registry and excluded patients with prior prescriptions of antidepressants and/or anxiolytics within half a year before OHCA. We calculated time to the first prescription of antidepressants and/or anxiolytics following OHCA. Multivariable analyses were carried out using cause-specific Cox regression methods, taking competing risk of death into consideration.

Results

From 2,469 30-day OHCA survivors, we included 2,018 cases (median age 62 (IQR 53-71), 79.7% men) in the study population, of which 242 (11.2%) were prescribed an antidepressant and 165 (8.2%) were prescribed an anxiolytic drug during the first year after OHCA. Stratified by years (2001-2005 vs. 2006-2011), 77 (12.5%) versus 165 survivors (11.8%) were prescribed an antidepressant ($p = 0.92$), and 62 (8.2%) versus 103 (7.4%) survivors were prescribed an anxiolytic drug ($p = 0.78$). Cardiac arrest witnessed by bystander (HR 0.63 (95% CI 0.43-0.93,

$p = 0.019$) and bystander cardiopulmonary resuscitation (HR 0.73 (95% CI 0.53-0.99, $p = 0.045$), were in multivariable analyses associated with less prescriptions of antidepressants within follow-up period. Similar results were seen in prescriptions of anxiolytics: cardiac arrest witnessed by bystander (HR 0.57 (95% CI 0.36-0.90, $p = 0.015$), and bystander cardiopulmonary resuscitation (HR 0.57 (95% CI 0.39-0.83, $p = 0.003$). Age above 74 years, Charlson comorbidity index score above 0 and non-shockable initial heart rhythm were associated with death during the follow-up period.

Conclusions

Overall, 11.2% of the survivors were prescribed an antidepressant drug and 8.2% were prescribed an anxiolytic drug during the first year after OHCA. Cardiac arrests witnessed by bystander and bystander cardiopulmonary resuscitation were in our multivariable models associated with less prescriptions of antidepressants and anxiolytics, stressing the importance of early, prompt interventions in OHCA care on outcome.

Authors' details

¹Department of Anesthesiology and Intensive Care Medicine, Aalborg University Hospital, Aalborg, Denmark. ²Department of Health, Science and Technology, Aalborg University, Aalborg, Denmark. ³Department of Clinical Epidemiology, Aalborg University Hospital, Aalborg, Denmark.

Published: 16 July 2015

doi:10.1186/1757-7241-23-S1-A10

Cite this article as: Bundgaard et al.: Prescriptions of antidepressants and anxiolytics in survivors of out-of-hospital cardiac arrest - a nationwide register-based follow-up study. *Scandinavian Journal of Trauma, Resuscitation and Emergency Medicine* 2015 **23**(Suppl 1):A10.

* Correspondence: Kristian.Bundgaard@RN.dk

¹Department of Anesthesiology and Intensive Care Medicine, Aalborg University Hospital, Aalborg, Denmark

Full list of author information is available at the end of the article