

# **University of Huddersfield Repository**

Astin, Felicity, Horrocks, Judith, McLenachan, Jim, Blackman, Daniel J., Stephenson, John and Closs, S. José

P2519: The Impact of Transcatheter Aortic Valve Implantation on Quality of Life: A Mixed Methods Study

## **Original Citation**

Astin, Felicity, Horrocks, Judith, McLenachan, Jim, Blackman, Daniel J., Stephenson, John and Closs, S. José (2017) P2519: The Impact of Transcatheter Aortic Valve Implantation on Quality of Life: A Mixed Methods Study. European Heart Journal, 38 (S1). p. 525. ISSN 0195-668X

This version is available at http://eprints.hud.ac.uk/id/eprint/33854/

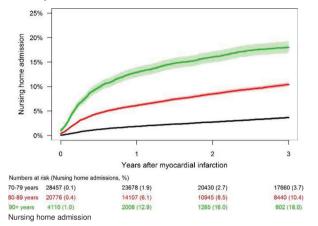
The University Repository is a digital collection of the research output of the University, available on Open Access. Copyright and Moral Rights for the items on this site are retained by the individual author and/or other copyright owners. Users may access full items free of charge; copies of full text items generally can be reproduced, displayed or performed and given to third parties in any format or medium for personal research or study, educational or not-for-profit purposes without prior permission or charge, provided:

- The authors, title and full bibliographic details is credited in any copy;
- A hyperlink and/or URL is included for the original metadata page; and
- The content is not changed in any way.

For more information, including our policy and submission procedure, please contact the Repository Team at: E.mailbox@hud.ac.uk.

http://eprints.hud.ac.uk/

responding all-cause mortality was 22.6% (n=12,059) and 34.9% (n=18,631). Age-stratified analysis showed that nursing home admissions within one year were 1.9 (95% confidence interval [CI] 1.7–2.0)%, 6.1 (CI 5.8–6.5)%, and 12.9 (CI 11.9–13.9)% for patients aged 70–79, 80–89, and >90 years, respectively (Figure). One-year mortality was 15.4%, 28.0%, and 43.0% for these age groups. After three years, nursing home admission rates were 3.7 (CI 3.5–3.9)%, 10.4 (CI 10.0–10.8)%, and 18.0 (CI 16.8–19.2)% for patients aged 70–79, 80–89, and  $\geq$ 90 years. Corresponding mortality rates were 25.4%, 41.8% and 55.3%, respectively. Main predictors of nursing home admissions were high age (hazard ratios [HRs] 2.72 [CI 2.45–3.02] and 5.18 [CI 4.56–5.90] for subjects 80–89 and  $\geq$ 90 years compared to those aged 70–79 years), living alone (HR 1.99 [CI 1.79–2.23], and female sex (HR 1.25 [CI 1.14–1.38]), and HR increased by 1.25 (CI 1.21–1.29) with every increase in the number of comorbidities.



**Conclusion:** In elderly patients with first MI, the risk of subsequent nursing home admission increased with age, female sex and baseline comorbidities.

Acknowledgement/Funding: Danish Agency for Science, Technology and Innovation and by the Danish Council for Strategic Research

#### P2518 | BEDSIDE

# Frailty and acute coronary syndrome in the over-70 population: frailty is more than age

F. Montenegro Sa<sup>1</sup>, A. Ponciano<sup>2</sup>, C. Ruivo<sup>1</sup>, L. Graca Santos<sup>1</sup>, A. Antunes<sup>1</sup>, F. Campos Soares<sup>1</sup>, F. Saraiva<sup>1</sup>, J. Guardado<sup>1</sup>, S. Pernencar<sup>1</sup>, P. Gomes<sup>1</sup>, J. Morais<sup>1</sup>. <sup>1</sup>Hospital Santo Andre, Cardiology, Leiria, Portugal; <sup>2</sup>Hospital Santo Andre, Internal Medicine, Leiria, Portugal

Introduction: Age is empirically used as a tacit marker for frailty, but according to Fried criteria - that evaluate slowing gait, unintentional weight loss, low daily-activity index, self-reported exhaustion and weakness - age is not a frailty determinant. Frailty impact is not fully understood in acute coronary syndrome (ACS) patients.

Aim: We aimed to evaluate frailty impact beyond age in ACS patients.

Methods: Monocentric retrospective longitudinal trial including 502 patients over 70 years old admitted between 2011 and 2016 with ACS, whose clinical data permitted simplified Fried criteria estimate. All patients with at least 3 criteria (n=126, 25.5%) were classified as frail (Fr). Demographic, clinical and laboratorial data, past medical history and coronary anatomy information when known were included. Mean follow-up time was 28 months. The population was classified according to occurrence of a composite outcome of death, reinfarction, ischemic stroke or major bleeding (DRIM). Univariate analysis was performed to compare the 2 groups.

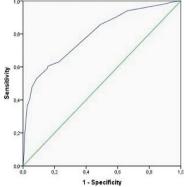
To identify if frailty was a DRIM predictor, the authors used a regression model with all significant data.

**Results:** DRIM occurred in 119 (24.0%) patients. Univariate analysis is presented in the table. After multivariate analysis, frailty (OR=10.31, CI [5.1–17.5], p<0.001) and dyslipidemia (OR=5.81, CI [2.9–8.5], p<0.001) were independent predictors of DRIM (picture).

Univariate comparison between groups

	DRIM (n=119)	No DRIM (n=383)	p-value
Female gender (%, n)	31.6 (84)	29.4 (121)	0.734
Age (μ ± SD)	78.5±5.2	77.2±5.6	0.030
Dyslipidemia (%, n)	70.6 (84)	46.0 (176)	< 0.001
Arterial hypertension (%, n)	69.7 (83)	76.8 (294)	0.145
Type 2 diabetes mellitus (%, n)	23.5 (28)	33.1 (137)	0.075
Active smokers (%, n)	10.9 (13)	14.6 (56)	0.444
Previous ACS (%, n)	11.8 (14)	14.6 (56)	0.545
Previously known heart failure (%, n)	4.20 (5)	1.30 (5)	0.048
No chronic kidney lesion (%, n)	92.4 (110)	95.6 (366)	0.399
No previous stroke (%, n)	92.4 (110)	91.6 (351)	0.993
Grace score (μ ± SD)	144.1±17.8	134.8±17.8	< 0.001
Frailty (%, n)	55.5 (66)	15.7 (60)	< 0.001

Conclusion: Frailty, as identified by Fried criteria, is prevalent in older ACS pa-



ROC Curve - AUC=0.79

tients, presenting itself as an independent predictor of bad prognosis whose impact surpasses age itself.

#### P2519 | BEDSIDE

# The impact of transcatheter aortic valve implantation on quality of life: a mixed methods study

F. Astin<sup>1</sup>, J. Horrocks<sup>2</sup>, J. McLenachan<sup>3</sup>, D.J. Blackman<sup>3</sup>, J. Stephenson<sup>4</sup>, S.J. Closs<sup>2</sup>. <sup>1</sup>University of Huddersfield and Calderdale and Huddersfield NHS Trust, Huddersfield, United Kingdom; <sup>2</sup>School of Healthcare, The University of Leeds, Leeds, United Kingdom; <sup>4</sup>University of Fluddersfield, Centre for Research in Applied Health, School of Human and Health Sciences, Huddersfield, United Kingdom

Transcatheter agrtic valve implantation is considered to be the gold standard of care for inoperable patients diagnosed with severe symptomatic acquired aortic stenosis. Mid- to long-term clinical outcomes are favourable and questionnaire data indicate improvements in quality of life. To our knowledge no published studies provide an in-depth understanding of patients' views about their quality of life during early recovery to identify outcomes of greatest importance to this frail elderly population. The aim of our study was to address this research gap. Methods In a mixed methods study design, in-depth qualitative interviews were conducted with participants (39% male; mean age 81.7 years), 1 and 3 months post TAVI, recruited from a regional centre in England. Data were triangulated with guestionnaire data (SF-36 and EQ5D) collected concurrently, pre, 1 and 3 months post implantation. Qualitative and quantitative data were analysed using the Framework method and analysis of variance were conducted respectively. Results A total of 89 in-depth interviews were conducted which explained participants' views of the impact of the procedure reflected a transition from, a life that was perceived to be shortened and limited by their condition, to one that was extended in duration and changed in its nature. Questionnaire data supported interview data with gradual improvements in mean EQ-5D scores and SF-36 physical and mental component scores at 1 and 3 months compared to baseline. Conclusion For most, but not all, Transcatheter aortic valve implantation gave recipients confidence that they no longer facing imminent death, alongside relief of physical symptoms enabling them to live fuller lives.

**Acknowledgement/Funding:** National Institute for Health Research (Research for Patient Benefit)

### SPORTS CARDIOLOGY

### P2520 | BEDSIDE

Higher incidence of atrial fibrillation in cross-country skiers is not associated with a higher risk of stroke

N. Svedberg<sup>1</sup>, J. Sundstrom<sup>2</sup>, S. James<sup>2</sup>, U. Hallmarker<sup>2</sup>, K. Andersen<sup>2</sup>. 
<sup>1</sup> Falun Hospital, Department of Cardiology, Falun, Sweden; <sup>2</sup> Uppsala University Hospital, Department of Medical Sciences, Cardiology, Uppsala, Sweden

**Objective:** To investigate associations between endurance training and risk for atrial fibrillation and stroke. To establish potential sex differences.

**Design:** A cohort study comparing participants in "Vasaloppet", a 30–90 km cross country skiing event, with the general population.

Setting and participants: All Swedish skiers (n=219,889) completing one or more races in "Vasaloppet" (1989–2011) and a sample (n=537,804) of non-skiers representing the general population were followed until the first event of atrial fibrillation and stroke. Cox regression was used to investigate associations of number of completed races and finishing time with risk of atrial fibrillation and stroke. Results: Participants in "Vasaloppet" had lower risk of atrial fibrillation compared to non-skiers. Participants completing the most number of races had higher risk of atrial fibrillation compared to participants completing one race. A trend towards higher risk of atrial fibrillation among the fastest skiers was observed (not shown). Female skiers had lower risk of atrial fibrillation independent of finishing time and number of completed races. All skiers had lower risk of stroke compared to non-skiers, independent of number of completed races and finishing time.