modification. This case demonstrates the role of RotaShock in primary percutaneous coronary intervention. In this case we were able to perform complex calcium modification techniques in a patient in extremis requiring mechanical circulatory support with excellent radiological and ultimately clinical result. 

Conflict of Interest No conflicts to declare.

Allied health professionals/Nursing/Health scientists

NURSE-LED SEDATION IS SAFE AND EFFECTIVE, SHORTENING PROCEDURE TIMES, AND IMPROVING ACCESS FOR SELECTED TRANSCATHETER AORTIC VALVE IMPLANTATION (TAVI) PATIENTS

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Background Aortic Stenosis is the commonest single cardiac valve lesion and Transcatheter Aortic Valve Implantation (TAVI) is now the dominant treatment modality for intervention. The great majority of TAVI procedures are performed under sedation rather than general anaesthetic (GA) however the need for anaesthetist with operating department practitioner support can impose limitations on scheduling and cost thereby limiting access for patients. Method: We implemented a nurse-led TAVI sedation program at a regional centre for selected patients after a dedicated training and mentoring program with anaesthetic support available. From July 2018 until September 2021 inclusive we reviewed consecutive cases with regard to Nurse-led sedation (NLS) vs Anaesthetist-led sedation (ALS). 30-day British Cardiovascular Intervention Society (BCIS) risk estimation, clinical outcomes, procedure duration and length of hospital stay were assessed. Analysis was with the Chi^2 test for categorical variables and independent samples t-test for continuous variables.

Results 646 patients were identified with 22 undergoing GA and 624 (97%) undergoing sedation. Of the sedation patients, 212 (34%) underwent NLS and 412 (68%) underwent ALS. The BCIS 30-day risk scores were similar in both groups (NLS 2.2 vs ALS 2.3 p=0.56). Procedural success was similar between the groups (NLS 100% vs ALS 98.5% p=0.07). For NLS cases, anaesthetic support was sought with telephone discussion in 3 cases (1.4%) and physical attendance in a further 8 cases (3.8%). Clinical outcomes were similar between the groups: (NLS vs ALS) 30-day mortality 1.9% vs 3.7% (p=0.22), Conversion to GA 1.9% vs 2.4% (p=0.67), Vascular access major bleeding 3.3% vs 4.1% (p=0.33), Moderate/severe aortic regurgitation: 4.8% vs 4.2% (p=0.75), Stroke: 4.2% vs 1.7% (p=0.13), New permanent pacemaker implantation 9.4% vs 12.9% (p=0.26). Procedural duration was significantly less with NLS vs ALS (90 mins vs 111 mins p=0.001). Length of hospital stay was similar 3(2–5) days vs 4(2–5) days (p=0.44).

Conclusion This study suggests that an NLS program can be safely introduced into routine TAVI practice with appropriate training and case selection by the Heart Team. Such an approach appears to deliver similar outcomes to ALS with shorter procedural times. It is likely that with increasing experience a greater proportion of TAVI patients will be suitable for NLS. This approach should deliver significant savings in terms of anaesthetic resources alongside more flexible arrangements for scheduling, increased capacity, and improved access for patients.

Conflict of Interest none

OXYGEN UPTAKE EFFICIENCY SLOPE - A VALUABLE SUBSTITUTE FOR PEAK VO2?

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Introduction Cardiopulmonary exercise testing (CPEx) provides valuable diagnostic and prognostic cardiopulmonary function data. However, in clinical setting a maximal test is not always achievable. The Oxygen Efficiency Uptake Slope (OUES) has been proposed as a possible submaximal measure of cardiopulmonary function as it remains relatively stable during the final quartile of the exercise test. This study explored the validity of OUES as a surrogate marker for
cardiopulmonary function in the event of a submaximal test. METHODS: Four groups of subjects [128 healthy controls (73 M), 44 asymptomatic hypertensive (HT) patients (26 M), 67 adult cardiac congenital heart disease (ACHD) patients (44 M) and 35 Heart Failure with preserved Ejection Fraction (HFpEF) (10 M) patients] were recruited after informed consent. All subjects underwent clinical assessment, resting ECG, blood pressure and spirometry prior to a treadmill CPEX to volitional exhaustion and a respiratory exchange ratio (RER) of at least 1.1 using the same testing protocol. Peak VO2 (ml/kg/min) was recorded from the last 5s of the maximal test. Our data support the use of submaximal OUES at an RER of 0.9 as a surrogate marker for absolute peak VO2 obtained at an RER of 1.1, especially in patients, in whom it can often be difficult to achieve maximal exercise.

Conflict of Interest None

Abstract 76 Figure 1

77 PREVENTING STROKE IN PATIENTS WITH ATRIAL FIBRILLATION AND INTRACEREBRAL HAEMORRHAGE: A QUALITATIVE STUDY OF PHYSICIANS’ DECISION-MAKING

Introduction Initiating long-term oral anticoagulation (OAC) therapy in patients with atrial fibrillation (AF) who have sustained an intracerebral haemorrhage (ICH) has clinical equipoise due to the lack of clinical trial evidence. Understanding how physicians make decisions about stroke prevention in these patients will support and improve current decision-making practice and inform future guidelines.

Aim To explore physicians’ decision-making around prescription of long-term OAC for stroke prevention in patients with AF following an ICH.

Methods Qualitative sub-study of the PREvention of StROKE in Intracerebral haemorrhage survivors with Atrial Fibrillation (PRESTIGE-AF) trial [NCT NCT03996772]. Semi-structured interviews with data analysed using Framework analysis.

Results Twenty physicians across five European countries (Spain, France, Germany, Austria, UK) participated. The umbrella theme ‘Managing uncertainty’, addressed the process of making high-risk clinical decisions in the context of little available robust trial evidence for best practice. Three sub-themes were identified under the umbrella theme: (1) ‘Computing the Risks’, captured the challenge of balancing the risks of ischaemic stroke with the risk of recurrent ICH; (2) ‘Patient Factors’ highlighted the influence that patients’ health beliefs, previous experience of stroke, and willingness to engage with OAC had on physicians’ decisions; and (3) ‘Making a Decision’ explored the process of reaching a final decision regarding initiation of OAC therapy or not (Figure).

Conclusion Key factors that affected decision-making were patient comorbidities, functional status, and physician-perceived patient willingness to engage with OAC. The sense of clinical equipoise led to physicians relying as much on their personal experience and on joint decision-making with fellow physicians as on available clinical evidence. Shared decision-making between the physician and the patient was believed to be beneficial but physicians believed that the ultimate responsibility to decide on stroke prevention lay with them. Future practice should support physicians in communicating clinical uncertainty to patients and encourage patients and physicians to work together to understand individual patients’ needs.