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Book of Abstracts

Contents

CQ - Clinical Quality - CQ - Patient Safety [Poster]

1217 A safety review of combination antithrombotic therapy in frail adults

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Introduction
Polypharmacy is becoming increasingly common, particularly amongst the elderly and multi-morbid patient groups (Duerden M, Avery T, Payne R, The Kings Fund, 2013). It was estimated in 2020 that 237 million medication errors occur annually in England (Elliott R, Camacho E, Jankovic D et al, BMJ Quality & Safety 2021;30:96-105). There are several indications for being on combination antiplatelet and an anticoagulant therapy including atrial fibrillation with acute coronary syndrome and venous thromboembolism with acute coronary syndrome (Barnes G, Hematology Am Soc Hematol Educ Program 2020 (1): 642–64.). When patients are admitted to hospital it is an opportunity undertake a medication review.

Methods
We undertook a notes review of discharges from Worthing Hospital on combination antithrombotic therapy. We reviewed the indication and planned duration for dual therapy for each patient and whether this was documented and communicated in the discharge summaries. Data was collected on patients discharged from Worthing Hospital between January and June 2021 on an antiplatelet and an anticoagulant. We included patients aged 65 or over with a clinical frailty score of five or above. A total of 50 discharges from hospital were reviewed, with a total of 43 patients. Six patients were admitted twice during the time period and their discharge summaries were reviewed individually. The notes were also re-reviewed from a perspective of 12 months later to review current health and medication status.

Results
Out of 50 discharge summaries, 13 (26%) had an indication and seven (14%) had the duration for dual therapy explicitly documented. 21 of 43 (49%) had died since their original admission 12 months previously.

Conclusion
Our review suggests that we are not routinely reviewing and documenting the indication for and duration of dual antithrombotic therapy in this cohort where both disease and mortality burden is high.

A Safety Review of Combination Anti-thrombotic Therapy in Frail Adults

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NHS
University Hospitals Sussex
NHS Foundation Trust

Aim

Our aim was to examine our practices around prescription, review and documentation of combination antithrombotic therapy in our cohort of frail, elderly patients.

We use combination antithrombotic therapy to mean oral therapy with both an antiplatelet agent and an anticoagulant.

Background

Antiplatelets and antithrombotic agents are frequently prescribed medications in the UK. Polypharmacy is increasingly common, particularly amongst the elderly and multi-morbid patient groups (1). It was estimated in 2020 that 237 million medication errors occur annually in England (2). When patients are admitted to hospital it is an opportunity undertake a medication review.

There are several indications for being on combination antiplatelet and anticoagulant therapy including atrial fibrillation (AF) with acute coronary syndrome (ACS) and venous thromboembolism with ACS(3).

The European Society of Cardiology (ESC) has guidelines on secondary prevention after ACS (4). It recommends, for patients with both an indication for antiplatelets and oral anticoagulation:

- either 12 months of dual therapy,
- triple therapy for one month followed by dual therapy for the remainder of the 12 months,
- or triple therapy for 6 months followed by dual therapy for up to 6 months (4).

Methods

We undertook a notes review of discharges from Worthing Hospital on combination antithrombotic therapy.

Data was collected on patients discharged between January and June 2021. Our search criteria included: patients discharged on an antiplatelet agent (aspirin, clopidogrel) and an oral anticoagulant (apixaban, rivaroxaban, warfarin, dabigatran). We included patients aged ≥65 with a clinical frailty score (CFS) ≥ five. We excluded patients lacking completed discharge summaries or documented CFS.

Data was recorded on age, CFS and antithrombotic therapy. Discharge summaries were reviewed for indication and duration for dual therapy and if dual therapy had been initiated during that admission. If indication was not clear the notes were reviewed (by a medical registrar) to find the indication for dual therapy.

The notes were re-reviewed from a perspective of 12 months later to review current health and medication status.

Results

A total of 50 discharges were reviewed, for 43 patients. Six patients were admitted more than once and their discharge summaries were reviewed individually.

The age range was 67 to 106 years old (mean of 82). CFS range 5 to 8 (mean of 6).

Out of 50 discharge summaries: 13 (26%) had an indication and seven (14%) had the duration for dual therapy documented.

14 patients had dual therapy initiated during that admission. 35 out of the 43 patients (81%) had a likely indication for dual therapy documented somewhere else in their medical record.

The categories for dual thrombotic therapy were divided into five (table 1.) 10 patients (out of 50) had active bleeding or anaemia requiring blood or iron infusion documented on their discharge summary.

When the notes were reviewed from the perspective of 12 months later, 21 of 43 (49%) had died since their original admission. Of the 22 remaining patients: 6 were still on dual antithrombotic therapy, 7 were no longer on dual antithrombotic therapy and 9 did not have any recent notes to review (therefore unknown).

Table 1. Categories of dual anti-thrombotic therapy found.

	Number of patients	Percentage (%)
AF & ACS within 12 months	12	34.2
AF & history of ACS > 12 months ago	13	37.1
Thromboembolism & history of ACS	0	0
AF & peripheral vascular pathology	4	11.4
Multiple indications	2	5.7
Other	3	8.5

21 patients (49%) died in the 12 months following their admission. The age range of these patients was 68 to 106 (mean 84) and the CFS range 5 to 8 (mean 6). The 12 month mortality data by CFS score for the hospital (2017/2018) was 31% of CFS, 37% for CFS 6 and 46% for CFS 7.

Discussion

13 patients (37%) were on dual anti-thrombotic therapy for AF with a history of ACS more than 12 months previous. It is not clear whether these medications had been intentionally continued following medical evaluation or overlooked and continued due to lack of review. Many patients also had delay to follow up across specialties due to the impact of the covid pandemic. Based on our data we are not routinely documenting that antithrombotic therapy is reviewed during admission (only 26% had documentation on the discharge summary).

Only 81% of the patients had a recognised indication for dual anti-thrombotic therapy documented anywhere in their electronic patient records. This demonstrates the importance of such medications being reviewed each time patients have contact with healthcare services, particularly when patients have complications such as anaemia requiring treatment.

The 12 month mortality for our patient group was 49%. This is high when compared to the expected mortality based on CFS. This particularly highlights that this is a vulnerable group to mortality and morbidity.

Conclusions

Our review identified patients that were on dual anti-thrombotic therapy for longer durations than recommended in the ESC guidelines. This may be due to lack of medication review or lack of knowledge and confidence around the guidelines.

Our data also suggests that we are not routinely reviewing, despite opportunities, the indication for and duration of dual antithrombotic therapy in this cohort where both disease and mortality burden is high.

Contact

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6) Western Sussex Hospitals Informatics Department

CQ - Clinical Quality - CQ - Clinical Effectiveness [Poster]

1235 Improving Heart Failure Management within Hospital at Home

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Introduction
Heart failure (HF) is a common problem managed in our West Lothian multi-disciplinary hospital at home (HaH) service, however significant variation in practice was noted with considerable resource implications. We aimed to standardise and improve this by developing a dedicated protocol.

Methods
We developed a protocol to guide the assessment and management of HF within HaH. We collected baseline (n=25) and follow-up data (n=10) after protocol introduction from patients referred to HaH with heart failure. Outcomes reviewed included anticipatory care planning (ACP) decisions, length of stay (LOS) and treatment strategy. We held staff education sessions and surveyed staff confidence regarding HF management.

Results
ACP discussion rates improved after protocol introduction, with decision rates improving for both escalation of care (28% to 80%) and resuscitation (44% to 60%). LOS reduced after protocol introduction (mean 6.3 days to 5.9 days). Titration of oral diuretics alone (71%) was associated with a shorter LOS (mean 5.4 days) compared to IV (29%, mean 8.1 days), with no difference in 28 day outcome. In those with HF with reduced ejection fraction, the rates of beta-blocker prescription increased (57% to 80%) however ACE-inhibitor prescription decreased (29% to 20%). Use of add-on therapy (e.g. thiazide diuretics) increased (12% to 30%) with a decrease in complication rates (12% to 0%). All staff found the protocol helpful with an improvement in confidence levels.

Conclusions
Through introducing a standardised protocol, we observed an improvement in anticipatory care discussion rates and a trend towards shorter LOS. Oral diuretic titration was less resource intensive without an adverse impact on outcome. Future plans include ongoing education and data collection, trialling a joint multi-disciplinary meeting with cardiology for discussion of complex patients and embedding a treatment strategy of oral diuretic titration with a 'discharge with planned review' approach in appropriate patients.

Improving Heart Failure Management within Hospital at Home

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2. Department of Cardiology, St John's Hospital, Livingston, UK

Introduction and Aims

Heart failure (HF) is a common problem managed in our West Lothian multi-disciplinary Hospital at Home (HaH) service, however significant variation in practice was noted in heart failure management with considerable resource implications. We aimed to standardise and improve this by developing a dedicated protocol.

Methods

We developed a protocol (Fig. 1,2) to guide the assessment and management of HF within HaH, using national heart failure guidelines and input from the local cardiology team. We collected baseline (n=25) and follow-up data (n=10) after protocol introduction from patients referred to HaH with heart failure. Outcomes reviewed included anticipatory care planning (ACP) decisions, length of stay (LOS) and treatment strategy. We held staff education sessions and surveyed staff confidence regarding HF management.

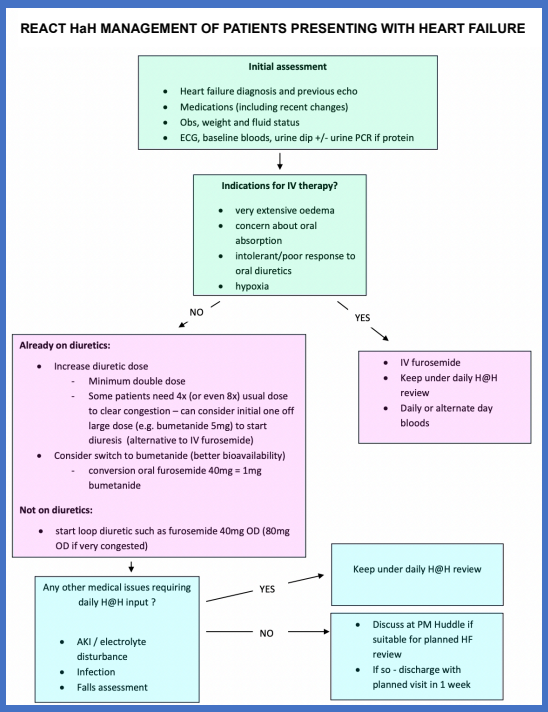


Figure 1: Heart Failure Protocol - Assessment and Initial Management

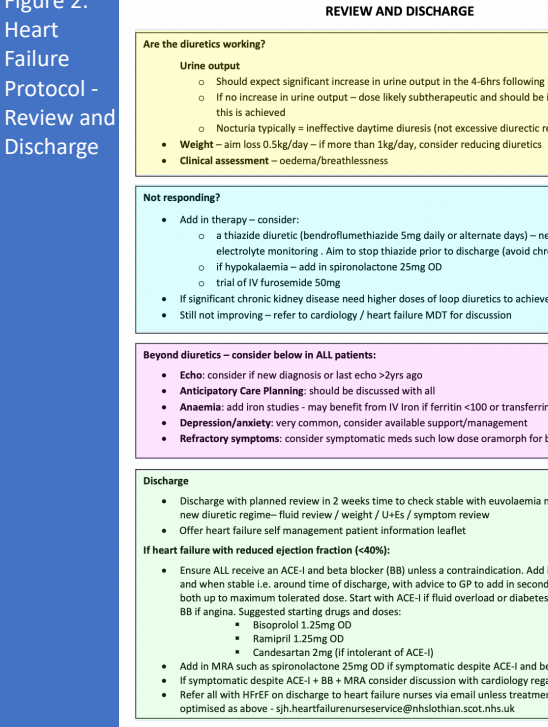


Figure 2: Heart Failure Protocol - Review and Discharge

Conclusions

A standardised heart failure protocol improved anticipatory care discussion rates, staff confidence and reduced length of stay

Oral diuretic titration is associated with a shorter length of stay and is less resource intensive

Future plans

- **Multi-disciplinary meetings with cardiology for complex patients**
- **Embedding a treatment strategy of oral diuretic titration and 'discharge with planned review' in appropriate patients**

Results

- ACP discussion rates improved after protocol introduction, with decision rates improving for escalation (28% to 80%) and resuscitation (44% to 60%) (Fig. 4)
- LOS reduced after protocol introduction (mean 6.3 days to 5.9 days). Titration of oral diuretics alone (71%) was associated with a shorter LOS (mean 5.4 days) compared to IV (29%, mean 8.1 days) (Fig. 5)
- In those with HF with reduced ejection fraction, the rates of beta-blocker prescription increased (57% to 80%) however ACE-inhibitor prescription decreased (29% to 20%). Use of add-on therapy (e.g. thiazide diuretics) increased (12% to 30%) with a decrease in complication rates (12% to 0%)
- All staff found the protocol helpful in assessing and managing patients with heart failure (88% strongly agree) with an improvement in confidence levels (Fig. 3,6)

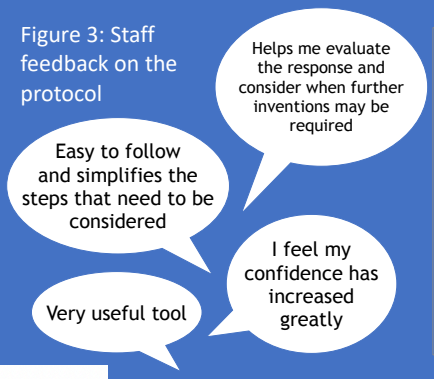
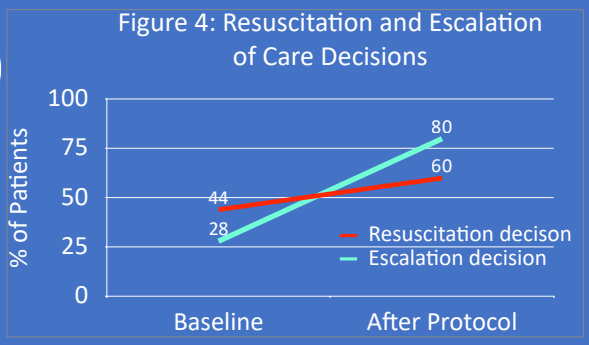
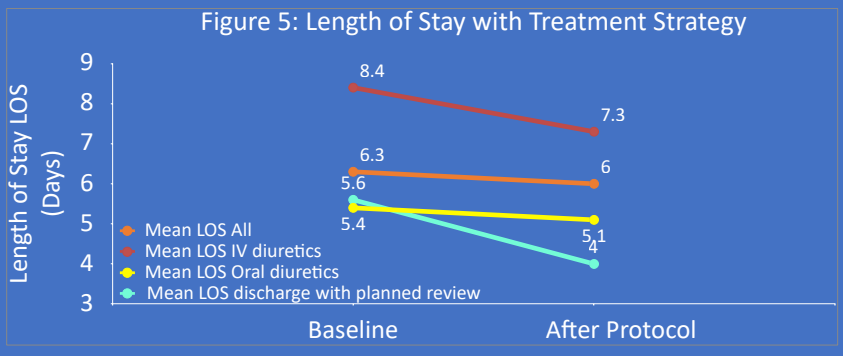
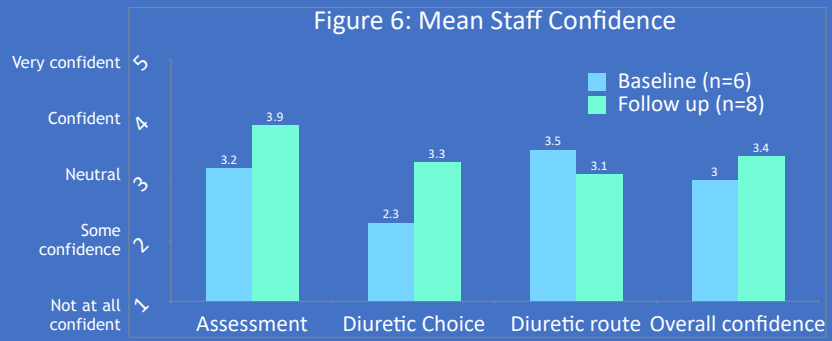


Figure 3: Staff feedback on the protocol







SP - Scientific Presentation - SP - Cardio (Cardiovascular) [Poster]

1258 Valve-in-valve transcatheter aortic valve implantation for failing surgical Perceval valves in four older patients

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Introduction:
Aortic valve disease is common amongst older patients. The Perceval Valve has been increasingly used in Surgical Aortic Valve Replacement (SAVR) in recent years due to less invasive surgical technique associated with reduced cardiopulmonary bypass times (Davies RA, Interact Cardiovasc Thorac Surg, 2016;23(5):814-20.). However, there can be shorter time to prosthesis dysfunction (Landes U, EuroIntervention, 2019;15(1):37-43 .) in which case the failing Perceval may require intervention. This cohort are often older patients with multi-morbidity. Valve-in-valve transcatheter aortic valve implantation (ViV-TAVI) offers an alternative strategy for aortic valve re-intervention in such patients (Webb JG, J Am Coll Cardiol, 2017;69(18):2253-62.). Experience of this technique is limited.

Methods:
We report our experience of VIV-TAVI in four older patients with early-failing Perceval valves (two with stenosis and two with regurgitation) at the cardiothoracic centre University Hospitals Sussex in Brighton UK between Feb-Nov 2020.

Results:
Four elderly patients (age 66-78 years) presented with Perceval valve dysfunction an average of 4.6 years following SAVR. The average aortic valve area improved from 0.8 cm2 pre-procedure to 1.5 cm2 post-procedure. The mean gradient (MG) improved from 35.5 mmHg (range 19.7-53 mmHg) pre-procedure to 14.8 mmHg (range 7-30 mmHg) post-procedure. There were no significant peri-procedural complications such as need for pacemaker. One patient suffered a small access related vascular pouch which was effectively treated with a stent. There were no other minor complications. In three of the patients length of stay was 1-2 days. One patient's total hospital stay was 25 days owing to the complexity and acuity of their condition. However, this patient was discharged home 2 days following ViV-TAVI and was asymptomatic from a cardiac standpoint 6 months post procedure.

Conclusions:
ViV-TAVI is a useful option for failed Perceval valves in an older population and appears safe and effective in this small series.

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Valve-in-valve transcatheter aortic valve implantation for failing surgical Perceval valves in four older patients

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Introduction

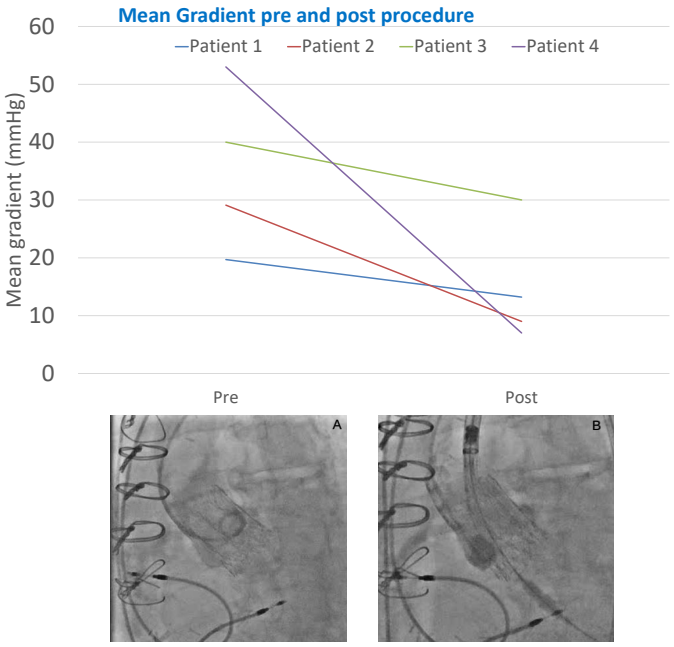
- Aortic valve disease is common amongst older patients and is associated with significant mortality and morbidity [1].
- Though Surgical Aortic Valve Replacement (SAVR) remains the gold standard of care for severe Aortic Valve Stenosis, Transcatheter Aortic Valve Implantation (TAVI) has comparable outcome data in older population cohorts of intermediate to high surgical risk [2].
- The Perceval Valve has been increasingly used in SAVR in recent years due to less invasive surgical technique associated with reduced cardiopulmonary bypass times [3].
- However, we have observed several cases of relatively early haemodynamic failure of the Perceval valve.
- This cohort are often older patients with multi-morbidity who carry a high surgical risk.
- Valve-in-valve TAVI (ViV-TAVI) offers an alternative strategy for aortic valve re-intervention in such patients with low mortality and improved haemodynamic parameters demonstrated [4]. Experience of this technique remains limited.

Methods

- We report our experience of ViV-TAVI in four unselected cases of older patients with early-failing Perceval valves (two with stenosis and two with regurgitation) at the cardiothoracic centre University Hospitals Sussex in Brighton UK between Feb-Nov 2020.

Table: Clinical characteristics of each case (Abbreviations: LVEF, Left Ventricular Ejection Fraction; NYHA, New York Heart Association; EDS, Ehlers-Danlos syndrome; MR, Mitral Regurgitation; PAH, Pulmonary Arterial Hypertension; PPM, Permanent Pacemaker; HTN, Hypertension; HYPO, Hypothyroidism; CA, cancer; COPD, Chronic Obstructive Pulmonary Disease; IDA, Iron Deficiency Anaemia; AF, Atrial Fibrillation; CKD3, Chronic Kidney Disease Stage 3a; OSA, Obstructive Sleep Apnoea; BRAO, Branch Retinal Artery Occlusion; TIA, Transient Ischaemic Attack; *Concurrent anaemia felt to contribute to symptoms at this time

	Case 1	Case 2	Case 3	Case 4
Age (years)	78	72	73	66
Gender	F	F	F	F
SAVR date	30.6.2015	27.6.2016	18.5.2016	5.1.2015
ViV-TAVI date	30.9.2020	17.2.2020	24.2.2020	2.11.2020
Presenting Complaint	NYHA III	Pulmonary oedema (acute)	NYHA III	NYHA II/III
Co-morbidities	EDS, MR, PAH, PPM, HTN, HYPO	PPM, Breast CA, COPD, IDA	MR, PAH, HTN, AF, obesity, CKD3a, Anaemia	Obesity, OSA, smoker, AF, BRAO, TIA
Mechanism of Failure	Regurgitation	Regurgitation	Stenosis	Stenosis
Interval to Failure (years)	4.9	3.7	3.8	5.6
LVEF (%)	40-45	40-45	60-65	55-60
Coronary angiogram	Mild LAD disease	No significant disease	No significant disease	No significant disease
Complications	Vasc. access pouch stented	-	-	-
Immediate result	No gradient/regurgitation	No gradient/regurgitation	Small gradient	Small gradient
Length of stay (days)	2	25	2	1
Discharge status	Asymptomatic	Asymptomatic	NYHA III*	Asymptomatic



A. Aortogram B: Self-expanding (CoreValve) valve deployed at an ideal height with no paravalvular leak. [5]

Results

- Four elderly patients (age 66-78 years) presented with Perceval valve dysfunction an average of 4.6 years following SAVR.
- The mean gradient (MG) improved from 35.5 mmHg (range 19.7-53 mmHg) pre-procedure to 14.8 mmHg (range 7-30 mmHg) post-procedure.
- There were no significant peri-procedural complications such as need for pacemaker. One patient suffered a small access related vascular pouch which was effectively treated with a stent.
- In three of the patients length of stay was 1-2 days.
- One patient's total hospital stay was 25 days owing to the complexity and acuity of their condition. However, this patient was discharged home 2 days following ViV-TAVI and was asymptomatic from a cardiac standpoint 6 months post procedure.

Discussion

- The literature shows that Perceval valve failure may occur early (<30days) or late (>1year) post SAVR.
- Regarding late failure haemodynamic degeneration of surgically placed aortic bioprostheses is a well-recognised phenomenon.
- Leaflet calcification and patient cardiometabolic risk factors have been shown to be accelerating factors with this degeneration is associated with adverse patient outcomes [6].
- Our study is limited by its sample size.

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Conclusions

- **ViV-TAVI is a useful option for failed Perceval valves in an older population and appears safe and effective in this cohort.**

CQ - Clinical Quality - CQ - Clinical Effectiveness [Poster]

1259 Patient focused liaison service for the elderly – expanding an established service into a tertiary centre for cardiac surgery

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Introduction
The Patient focUsed Liaison Service for the Elderly (PULSE) was established in the Bristol Heart Institute in 2020, following a pilot study estimating a potential saving of 700 bed days per annum through reduced readmissions. This consultant led service provides holistic care for cardiology patients in inpatient and outpatient settings. Interest from the cardiac surgery team has led to consideration of expanding into this department. Here we report on an assessment of frailty in cardiac surgery inpatients in general ward and cardiac intensive care (CICU) settings.

Methods
Following a standardising exercise, all cardiac surgery inpatients were assessed for frailty using the clinical frailty scale (CFS) on a given day in May 2022. The presence of any typical geriatric related pathology was also noted, in addition to demographic data. Comparative data were collected for all medical cardiology inpatients.

Results
Data were collected for 26 patients in cardiac surgery. Ward-based patients showed low levels of frailty (CFS≥5=0%), although many were deemed to be vulnerable due to underlying disease (CFS4=47%). Cardiac surgery patients in CICU were more likely to be frail (CFS≥5=41%, p=0.002) when compared with those outside of CICU. All patients with at least moderate frailty had presented acutely. The prevalence of major geriatric related pathologies was similarly higher in CICU patients (1[0-2]) compared to those on general cardiac surgery wards (0[0-0], p=0.02). When compared with 51 medical cardiology inpatients, cardiac surgery inpatients were significantly younger (60[53-77] vs 71[59-80], p=0.04), but displayed similar rates of frailty (CFS 4[3-4] vs 3[3-5], p=0.99) and major geriatric pathology (p=0.48).

Conclusion
Care of the elderly liaison services to cardiac surgery are likely to be most effective when targeted to the intensive care setting and to patients admitted acutely. The authors would encourage the development of similar liaison services in other UK tertiary cardiac centres.

Patient focUsed Liaison Service for the Elderly – expanding an established service into a tertiary centre for cardiac surgery

B Wildblood[1,2] R Davies[1] C Huang[1] 1 -University Hospitals Bristol and Weston NHS Foundation Trust 2 - University of Bristol

University Hospitals Bristol and Weston NHS Foundation Trust

Background and Aims

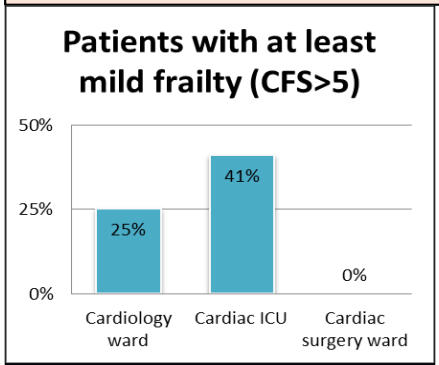
The Patient focUsed Liaison Service for the Elderly (PULSE) was established in the Bristol Heart Institute in 2020, following a pilot study estimating a potential saving of 700 bed days per annum through reduced readmissions. This consultant led service provides holistic care for cardiology patients in inpatient and outpatient settings. Interest from the cardiac surgery team has led to consideration of expanding into this department. Here we report on an assessment of frailty in cardiac surgery inpatients in order to demonstrate the need for a geriatric liaison service within cardiac surgery.

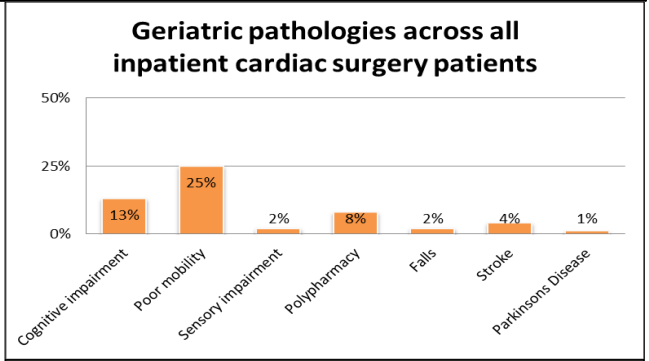
Methods

Following a standardising exercise, all cardiac surgery inpatients were assessed for frailty using the clinical frailty scale (CFS)[1] on a given day in May 2022. The presence of any typical geriatric related pathology was also noted, in addition to demographic data. Comparative data were collected for all medical cardiology inpatients. Staff working with cardiac surgery patients were also surveyed to determine their confidence with managing specific geriatric related pathologies and frailty.

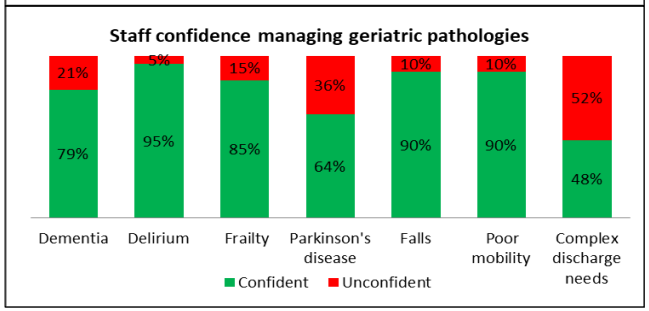
Results

Data were collected for 36 inpatients in cardiac surgery. Ward-based patients showed low levels of frailty (CFS≥5=0%), although many were deemed to be vulnerable due to underlying disease (CFS4=47%). Cardiac surgery patients in CICU were more likely to be frail (CFS≥5=41%, p=0.002) when compared with those outside of CICU. All patients with at least moderate frailty had presented acutely. The prevalence of major geriatric related pathologies was similarly higher in CICU patients (1[0-2]) compared to those on general cardiac surgery wards (0[0-0], p=0.02). When compared with 51 medical cardiology inpatients, cardiac surgery inpatients were significantly younger (60[53-77] vs 71[59-80], p=0.04), but displayed similar rates of frailty (CFS 4[3-4] vs 3[3-5], p=0.99) and major geriatric pathology (p=0.48). 19 members of staff were surveyed and 100% agreed that a regular care of the elderly liaison service would enhance patient care, and 1/3 of all of those surveyed felt uncomfortable managing pathologies such as Parkinson's disease and complex discharge needs.





'There is a need for an elderly care liaison service for cardiac surgery patients in ICU'



Conclusion

We have demonstrated a need for care of the elderly liaison services to cardiac surgery, and have shown that these are likely to be most effective when targeted to the intensive care setting and to patients admitted acutely. The authors would encourage the development of similar liaison services in other UK tertiary cardiac centres.

[1] Rockwood K. A global clinical measure of fitness and frailty in elderly people. *Can Med Assoc J.* 2005;173(5):489–95

CQ - Clinical Quality - CQ - Clinical Effectiveness [Poster]

1260 An audit of heart failure management - how do outcomes compare for patients admitted under cardiologists and geriatricians?

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1. Department of Elderly Medicine at Harrogate District Hospital; 2 Department of Elderly Medicine at St James' University Hospital, Leeds

Introduction

Heart failure is one of the commonest reasons for hospital admission and prevalence is increasing. Dual care between cardiologists and geriatricians has been suggested to help manage the cohort of patients with heart failure and frailty. At Leeds Teaching Hospitals NHS Trust patients are admitted under one of these specialities with no formal liaison. This audit aimed to assess heart failure management and outcomes of patients aged 80 years or over; comparing the two specialities against NICE guidance.

Method
Patients 80 years or older with a diagnosis of heart failure were identified for the period 01/11/2019 to 31/01/2020. Data was collected from the electronic patient record onto an Excel spreadsheet for analysis. Data included demographics, comorbidities, medications, interventions, escalation plans, length of stay and mortality.

Results
Of 198 patients, 61 were admitted under cardiologists and 120 under geriatricians (17 were excluded). The average age was similar. There was a trend towards patients under cardiologists being from their own home, with more polypharmacy and comorbidities; having a longer length of stay, and lower mortality. Of those under geriatricians, 31% had cardiology input and 13% had triple disease modifying drugs on discharge (compared to 38% under cardiologists). Of those under cardiologists 95% had an echocardiogram in the past year (compared to 66% under geriatricians). Those under geriatricians were more likely to have specialist input (97%) and follow up (75%) if they had an echocardiogram.

Conclusion
This audit identifies variation in care of patients over 80 years with heart failure between cardiologists and geriatricians and compared to national guidelines. We appreciate this is a highly heterogeneous group and there are many reasons for variation. This audit has helped develop a pilot of geriatrician in-reach to cardiology wards, with the aim of strengthening collaboration between specialities and improving outcomes for all patients.

Audit of heart failure management - how do outcomes compare for patients admitted under cardiologists and geriatricians?

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BACKGROUND

Heart failure is one of the commonest reasons for hospital admission and prevalence is increasing. Dual care between cardiologists and geriatricians has been suggested to help manage the cohort of patients with heart failure and frailty [1]. At Leeds Teaching Hospitals NHS Trust patients are admitted under one of these specialities with no formal liaison. This audit aimed to assess heart failure management and outcomes of patients aged 80 years or over; comparing the two specialities against NICE guidance [2].

METHODS

Patients 80 years or older with a diagnosis of heart failure were identified for the period 01/11/2019 to 31/01/2020. Data was collected from the electronic patient record onto an Excel spreadsheet for analysis. Data included admitting speciality, demographics, comorbidities, medications, interventions, escalation plans, length of stay and mortality.

The audit was presented at the Elderly Medicine departmental meeting 24/09/2021. Integration of the two services was enhanced with a four month cardiology in-reach service by an acting-up elderly medicine consultant. Small group teaching was delivered to junior doctors on elderly care wards.

A re-audit was completed between 01/01/2022 and 28/02/2022 of 20 consecutive patients with a diagnosis of heart failure admitted under elderly medicine. It focused on whether echocardiogram and brain natriuretic peptide (BNP) had been performed in the past 12 months and during admission.

RESULTS

Of 198 patients, 61 were admitted under cardiologists and 120 under geriatricians (17 were excluded). Demographics are shown in Table 1.

	Cardiology 61	Geriatrics 120
Age (mean years)	86	88
≥ 3 co-morbidities	71%	55%
CFS (median)	5 (limited)	6
Polypharmacy (≥ 5 meds)	85%	77%
Home with no support	83%	62%

Table 1. Demographics of the two cohorts

RESULTS

There was a trend towards patients under cardiologists being from their own home, with more polypharmacy and comorbidities; having a longer length of stay, and lower mortality. Of those under geriatricians, 31% had cardiology input and 13% had triple disease modifying drugs on discharge (compared to 38% under cardiologists).

Of those under cardiologists 95% had an echocardiogram in the past year (compared to 66% under geriatricians). Those under geriatricians were more likely to have specialist input (97%) and follow up (75%) if they had an echocardiogram. The re-audit showed that 10 patients (50%) had an echocardiogram in the past year and 16 (80%) had one during the admission or planned as an outpatient,

WHAT THIS ADDS

This audit identifies variation in care of patients over 80 years with heart failure between cardiologists and geriatricians and compared to national guidelines [2]. In particular it emphasises the lack of echocardiograms used in elderly medicine, which is a concern given the disparity with the national audit standard of 90% [1], and the impact it can have on clinical management.

These patients are a highly heterogeneous group and there are many reasons for variation of care. Routine frailty assessment was not taking place in cardiology, so comparison based on CFS was not possible.

WHERE NEXT?

The aim is to strengthen collaboration between specialities to improve outcomes for all patients. The pilot of geriatrician in-reach to cardiology ward is one example of integrated working. Other possibilities include collaboration of community frailty and heart failure services and virtual wards. The challenges of funding and workforce remain an issue.

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CQ - Clinical Quality - CQ - Clinical Effectiveness [Poster]

1263 The Value of a multidisciplinary team (MDT) in managing patients with complex or unexplained syncope

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Introduction:
Syncope is a common clinical problem with a lifetime prevalence of 20%.
1 It is defined as a transient loss of consciousness (TLoC) due to temporary global hypoperfusion characterised by a rapid onset, brief duration and spontaneous recovery.
2 Syncope shares clinical features with other disorders including seizures, metabolic disturbances and sleep disorders.
3 The role of MDT in Syncope is not well-established but, as in other specialities, a MDT is valuable to discuss complex cases.
To improve the diagnostic efficiency of syncope of uncertain aetiology and provide unified management, a MDT was established at the Queen Elizabeth University Hospital in November 2017. The syncope service is run by Geriatricians and Cardiologists and also incorporates a neurologist with a specialist interest in epilepsy and cardiac physiologists. We wanted to understand if the Syncope MDT improved diagnostic yield and reduced delay in commencing appropriate medication or wait time for additional investigations.

Method:
A retrospective case note analysis was performed for patients reviewed at the Syncope MDT between November 2017 and December 2021.

Results:
103 patients were discussed with an average age of 64 years. The main reason for referral was cardiology specialist advice (65%) followed by neurology specialist advice (19.4%) and complex case discussions (13.6%). After discussion at the MDT, the percentage of patients with an unexplained TLoC reduced from 26.2% to 14.6%. 8.7% of patients were started on anti-epileptic medication prior to outpatient neurology review after a diagnosis of seizure disorder was established and 23.1% of patients were streamlined for pacemaker or ILR insertion.

Conclusion:
Introduction of a Syncope MDT reduces unexplained syncope rates in complex patients, streamlines investigations, reduces the need for multi-speciality outpatient reviews and allows earlier introduction of anti-epileptic medication for those with a seizure disorder. These benefits improve the patient journey by reducing time to diagnosis and treatment.

The Value of a Multidisciplinary Team (MDT) for patients with complex or unexplained syncope

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Introduction:

Syncope is a common clinical problem with a lifetime prevalence of 20%.[1]

Syncope shares clinical features with other disorders including seizures, metabolic disturbances and sleep disorders which can make the diagnosis challenging for clinicians.[2]

Although MDTs are recognised key components in contemporary patient care in areas such as heart failure and cancer management, there is no guidance on MDT working in syncope management.[3/4]

In November 2017, a Syncope MDT was introduced at the QEUH involving cardiologists, geriatricians, a neurologist and cardiac physiologists.

This in-person MDT occurs monthly with outcomes recorded on electronic medical records in addition to a clinical database.

Aim:

The aim of this review was to understand the potential impact of the Syncope MDT on diagnostic yield and time to further investigation and management.

Methods

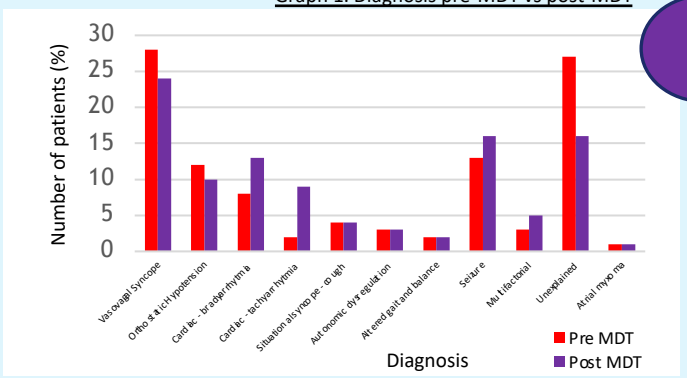
A retrospective case note analysis was performed for patients reviewed at the Syncope MDT between November 2017 and December 2021.

Results:

The total number of patients discussed at the MDT was 103 with an average age of 64 years (range 18-92). The main reasons for referral were:

- Cardiology specialist advice (65%)
- Neurology specialist advice (19.4%)
- Complex case review (13.6%)
- Other reasons included discussion of DVLA guidance and a retrospective case review.

Graph 1. Diagnosis pre-MDT vs post-MDT

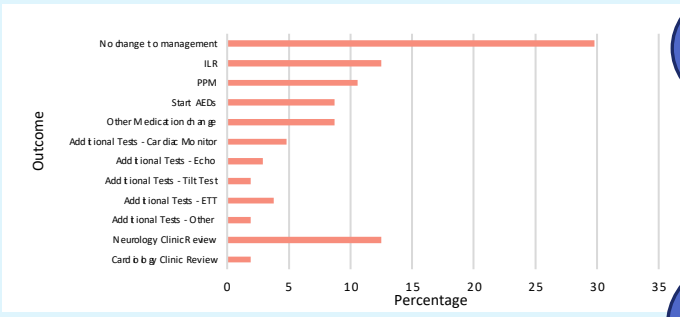


103

Total number of patients discussed at MDT

Unexplained TLOC: reduced from 26.2% to 14.2% after MDT input

Graph 2: Outcome from MDT

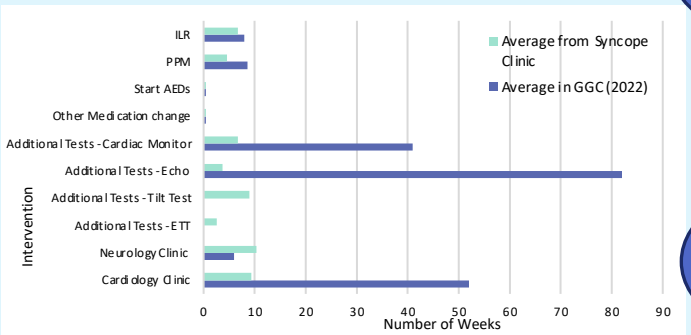


8.7% patients commenced anti-epileptic medication prior to outpatient neurology review

23.1% of patients were streamlined for pacemaker or ILR insertion.

14.4% patients were referred onto cardiology or neurology to take over their care

Graph 3: Average Time to Intervention (Days)



Further investigations were expedited for complex syncope patients

Delays to OP investigations were noted as a result of the COVID-19 Pandemic

The benefits of the MDT include:

- Agreement on current management plan (29.8%)
- Streamlines referral for pacemaker or ILR insertion (23.1%)
- Appropriate alternative additional investigations expedited (15.4%)
- Medication alteration including early introduction of anti-epileptics (17.3%)
- Follow-up with appropriate speciality team (14.4%)

Conclusion:

Introduction of a syncope MDT reduces unexplained syncope rates in complex patients, streamlines investigations, reduces the need for multi-speciality outpatient reviews and allows earlier introduction of anti-epileptic medication for those with a new seizure disorder. These benefits improve the patient experience by reducing time to diagnosis and treatment.

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SP - Scientific Presentation - SP - Cardio (Cardiovascular) [Poster]

1018 Ferrokinetic alterations in elderly patients from a Venezuelan health institution with a diagnosis of infarction

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Introduction:
Alterations in the ferrokinetic profile are associated with cardiovascular disease in elderly patients, and the short and long-term prognosis is currently unknown.

Methods:
Prospective analytical observational cohort study to determine the prognostic value of ferrokinetic profile alterations in patients with myocardial infarction with and without ST segment elevation, in a health institution of Venezuela from July 2017 to July 2018.

Results:
The patients were divided into 3 groups, from 60 to 70 years, 71 to 80 and older than 80 years, the main affected gender was the male, in ages over 80 years, being the infarction with ST elevation the most frequent. Among the associated comorbidities, the main one was arterial hypertension with 53.7% for myocardial elevation and 74.2% for myocardial infarction without ST elevation. The most frequent alteration of the parameters of the ferrokinetic profile studied was iron deficiency, found in 36.6% of patients with ST elevation and 41.9% without ST elevation. Low hemoglobin levels were present at admission (24.42%) of the subgroup with ST elevation and 32.30% for those without ST elevation, increasing the percentage to 31.7% (RR: 2) (95% CI -0.131-30,63), associated with low hemoglobin values on day 7 of hospitalization. There were 2 deaths (2.77%), which presented low iron levels without anemia and infarction with ST elevation complicated with cardiogenic shock.

Conclusions:
iron deficiency is a very frequent comorbidity with a high mortality ratio, likewise the decrease in hemoglobin after hospital admission was related to mortality, so both parameters should be taken into consideration.

"Ferrokinetic alterations in elderly patients from a Venezuelan health institution with a diagnosis of infarction"

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Table 1 Distribution by gender, age and type of infarction

Characteristic	Myocardial infarction: ST elevation n=29	Myocardial infarction: Non ST elevation n=21
Age		
≤ 55	9 (31,0)	4 (19,0)
56-65	8 (27,6)	5 (23,8)
66-75	7 (24,1)	5 (23,8)
>76	5 (17,2)	7 (33,3)
Gender		
Male	17 (58,6)	11 (52,4)
Female	12 (41,4)	10 (47,6)

Table 2 Distribution by comorbidities

Comorbidities	Myocardial infarction: ST elevation n=29	Myocardial infarction: Non ST elevation n=21
Hypertension		
Yes	17 (58,6)	15 (71,4)
No	12 (41,4)	6 (28,6)
Diabetes		
Yes	6 (20,7)	7 (33,3)
No	23 (79,3)	14 (66,7)
HF NYHA		
I	3 (10,3)	3 (14,3)
II	13 (44,8)	11 (52,4)
III	7 (24,1)	1 (4,8)
None	6 (20,7)	6 (28,6)
COPD		
Yes	5 (17,2)	5 (23,8)
No	24 (82,8)	16 (76,2)

Table 3 Ferrokinetic profile and type of infarction

Ferrokinetics	Myocardial infarction: ST elevation n=29	Myocardial infarction: Non ST elevation n=21
Iron levels		
Normal	23 (79,3)	11 (52,4)
Low	6 (20,7)	10 (47,6)
Ferritine		
Normal	28 (96,6)	20 (95,2)
Low	1 (3,4)	1 (4,8)
Transferrine		
Normal	22 (75,9)	17 (81)
Low	7 (24,1)	3 (14,3)
Elevated	0 (0)	1 (4,8)

Table 4 Odds Ratio for iron alteration and type of heart attack

Variable	Variable	Infarto al miocardio: ST elevation OR (n) IC(n-n)	Infarto al miocardio: Non ST elevation OR (n) IC(n-n)
Seric Iron	Less of 55	OR: 0,2 (IC95%: 0,06 - 0,7).	OR: 4.8 (IC95%: 1,4-16,1).

Conclusions

Iron deficiency is a very frequent comorbidity with a high mortality ratio, likewise the decrease in hemoglobin after hospital admission was related to mortality, so both parameters should be taken into consideration.