British Geriatrics Society
Improving healthcare for older people

BGS Trent Spring Meeting

22 April 2021, Virtual Event

Book of Abstracts

Platform presentations

Scientific Presentation - SP - Falls (Falls, fracture & trauma)
[Platform Presentation]

Chronic Medical conditions and falls as a risk factor for post traumatic stress disorder in the elderly – review

Ana Akhtar; Mizgan Masani

Pitie Salpetrière Charles Foix Hospital – UPMC Medecine-Paris Sorbonne Université; Universtiy of Wolverhampton

BACKGROUND AND AIM - Falling is considered the most common potentially traumatic events in late life. Primary attention is given to the immediate injuries and the psychological impact of falls are often under-estimated. Psychological impact of Chronic Medical Conditions (CMCs) and a traumatic event like falling, have been studied independently in the past. However, an elder person will most likely be affected by both multiple medical conditions and falling in their lifetime. Insufficient studies are conducted over the cumulative effects of such events and associating them with Post Traumatic Stress Disorder (PTSD). This study aims to highlight the PTSD potential of both these events (CMCs and Falling) in older patients.

METHOD - To reduce bias and enhance the quality of this study, adaptation of a methodology that was parallel to that of systematic reviews was undertaken. Key word strategies utilized for selection of articles were 'Chronic Medical conditions AND Falls', 'Chronic medical conditions AND PTSD' & 'PTSD AND Fall'. Database of Google Scholar and PubMed were utilized for selection of articles. Cross references were also added to the final compilation. Studies were included where the mean age of patients was more than 65 years.

RESULT - The literature search provided 26 articles which met the inclusion and exclusion criteria. It was found that there exists a significant inter-relation between Falls, CMCs, and PTSD. And that depression and anxiety were key factors that contribute to the development of PTSD in elders (64.7% of total selected studies)

CONCLUSION - Strong claims about an interaction between PTSD and falls are difficult to make due to insufficient studies but falls in this age group presents unique aspects and relates to the presence of CMCs and PTSD. Future research must integrate falls in context with PTSD and the psychological impact of falling should be elaborated.

Scientific Presentation - SP - HSR (Health Service Research) [Platform Presentation]

Care Homes, their communities, and resilience in the face of COVID-19: findings from a qualitative study

Fiona Marshall; Adam Gordon; John Gladman; Simon Bishop

NIHR Applied Research Collaboration-East Midlands (ARC EM); School of Medicine, University of Nottingham; Division of Medical Sciences and Graduate Entry Medicine, Derby Medical School; University Hospitals of Derby and Burton NHS Trust; NIHR Biomedical Research Centre (BRC), Nottingham; Nottingham University Hospitals NHS Trust; Nottingham University Business School, University of Nottingham.

Background: From late February 2020, English care homes rapidly adapted their practices in response to the COVID-19 pandemic. In addition to accommodating new guidelines and policies, staff had to adjust to reconfigurations of services and resources external to the home they would normally depend upon for support. This study examined the complex interdependencies of support, as perceived by care home mangers from May 2020 to January 2021. The aim was to inform more timely and effective responses to the pandemic, and to improve understanding of the ways in which care homes worked during the pandemic, and how to work with care homes and organisations once the pandemic has passed.

Methods: Eighteen managers of registered care homes in the East Midlands of England were interviewed by videoconference or phone about their experiences of the crisis using a structured organisational perspective. Analysis used an adapted organisational framework analysis approach with a focus on social ties and interdependencies between organisations and individuals.

Results: Three key groups of interdependencies were identified: care processes and practice; resources; and governance. Care homes had to deliver care in innovative ways, making high stake decisions in the circumstances defined by: fluid ties to external organisations; multiple, sometimes conflicting sources of expertise and information; respond to multiple tensions surrounding family visits; and a sense of reprioritisation by the authorities. Over time, the pandemic presented new challenges with an ever depletion of workforce resilience and sometimes support from external organisations. Initially, local organisations and individuals worked towards helping the homes overcome challenges as governmental responses led to a lack of key resources and timely relevant guidance. By the third wave, there is evidence that these local support networks had diminished, especially among smaller homes.

Conclusions: This study identified the importance of local communities, expertise within homes and governmental ambivalence.

Clinical Quality - CQ - Efficiency and Value for Money [Platform Presentation]

Around 30% of Hospital Readmissions can be avoided!

Prianka Baral,Andrew Gerges, Kwasi Debrah

Watford General Hospital

Hospital readmission has been recognized as one of the most significant financial burden on the entire hospital system. Reducing avoidable hospital readmissions supports better health outcomes, improves patient safety and leads to greater efficiency in the health system. We have recently done an audit on Hospital readmission, the aim of which was to find out how many of the readmitted patients of above age of 70 years , are getting readmitted due to avoidable reasons. Total Sample size was 55 ;data collected by using Infoflex & going through the medical notes of the patients .The Audit showed that around 30% of the readmissions were due to avoidable reasons and another 30% patients had both avoidable and unavoidable reasons. The most avoidable reason is unmet care needs, followed by side effects of medications and lack of timely follow up. 39 out of 55 patients had unavoidable causes for their readmissions. Among the unavoidable causes, falls and respiratory tract infection were most common. We also tried to learn about the comorbidities associated with increased risk of readmission and also whether discharge destination had any effect on their readmission. Shorter Hospital stay was found to be associated with increased readmission rates. Nearly 42% of readmitted patients had h/o initial hospital stay of less than 5 days.

Clinical Quality - CQ - Patient Safety [Platform Presentation]

Communication on the Acute Older Person's Unit – Improving MDT communication using Quality Improvement Methodology

Elizabeth Cotzias; Anna Barnard; Grace Walker

St Thomas' Hospital; St Thomas' Hospital; St Thomas' Hospital;

Introduction: The Guys and St Thomas Acute Older Peron's Unit (AOPU) delivers comprehensive geriatric assessment (CGA) to older people living with frailty who present to the Emergency Department. Effective multidisciplinary communication is vital to coordinate complex discharges and avoid unnecessary admissions. This quality improvement project aimed to implement strategies to improve handover communication between the AOPU medical and nursing teams.

Method: Semi-structured surveys about handovers were completed by nursing staff in November 2020. Quantitative data on the frequency of handovers was collected. We undertook a quality improvement project using the 'model for improvement' and PDSA (Plan, Do, Study, Act) cycles to test different interventions.

Results: The survey was completed by 20 nurses. The majority reported doctors "almost never" or "never" handed over after the ward round (55%, n=11), in the afternoon (55%, n=11) or before the end of the shift (63%, n=12). Lack of 'regular times to handover' was identified as a key barrier to effective communication. The first PDSA cycle identified nine critical handover points and introduced a 'communication checklist', kept on display in AOPU and completed daily. This resulted in an increase in handovers from 11% (1/9) of the critical handover times to 71% (6.4/9). The ward co-ordinator was updated at least twice a day (mean=2.3). Multiple members of the nursing staff were now being updated, whereas previously there had only been one handover to the co-ordinator. The second PDSA cycle implemented a nominated 'handover lead' responsible for ensuring handovers occurred each day. This was logistically challenging due to shift patterns and did not increase handover frequency.

Conclusions: A 'communication checklist', providing a visual prompt, improved handover communication on AOPU but a nominated 'handover lead' did not. PDSA cycles are a useful way to rapidly assess interventions so that effective ones can be scaled up and sustained.

POSTERS

Clinical Quality - CQ - Patient Centredness [Poster]

Managing decompensated heart failure in frail patients; what aspects could be improved and what could be done in the community?

Kathleen Clare; Lisa McNeil

Kathleen Clare (NHS Forth Valley); Lisa McNeil (NHS Forth Valley)

Introduction: There is a high burden of cardiovascular disease in the elderly. Hospitalisation in this vulnerable cohort can result in adverse outcomes. In NHS Forth Valley, the geriatrician-led Enhanced Community Team (ECT) helps support frail patients in the community and avoid inappropriate hospital admissions. The aim of this review is to investigate the management of heart failure in frail patients and the potential role for community based services such as ECT.

Methods; A retrospective review was performed on patients aged over 65 admitted to Forth Valley Royal Hospital between December 2019 and January 2020 with a primary diagnosis of decompensated heart failure who met frailty criteria. Case-notes were reviewed to determine details on their clinical management and outcomes.

Results; Approximately 10% of medical admissions aged over 65 were frail with a primary diagnosis of heart failure. The length of admission ranged from 1-98 days and averaged at 10 days. 59% of patients had a pre-existing diagnosis of heart failure. Only 26% of patients received an echocardiogram and 29% had a cardiology review. Oxygen was required in 62% of patients and intravenous diuretics in 79%. Outcomes were poor with a mortality rate during this admission calculated at 26% increasing to 44% at 6 months. A Rockwood score of 5 or above correlated with a higher mortality at 6 months at 65%.

Conclusions; This review suggests the majority of frail patients with decompensated heart failure could not be initially managed in the community due to their need for intravenous diuretics and oxygen therapy. It also highlights the inconsistences in specialist cardiology input with this cohort. For frail multi-morbid patients we plan to create and test a pathway for medical step-down to ECT and see whether this could evolve to manage community dwelling heart failure patients in conjunction with the heart failure team.

MANAGING DECOMPENSATED HEART FAILURE IN A FRAIL, ELDERLY COHORT; CAN WE IMPROVE?

Dr Kathleen Clare (CDF) Dr Lisa McNeil (CONSULTANT AGEING AND HEALTH) at Forth Valley Royal Hospital.

AIM

To determine whether frail patients aged over 65 with decompensated heart failure could be managed in the community.

BACKGROUND

The incidence and prevalence of cardiovascular disease is rising with our ageing population.

Frail patients make up a high proportion of hospital admissions and there is a well recognised increased risk of morbidity and mortality in this cohort, particularly in the context of heart failure[1].

The enhanced community team (ECT) is a geriatrician led multi-disciplinary service which supports patients with frailty in the community. This team also provides follow-up for medical step-downs from hospital.

METHODOLOGY

A retrospective review was performed on patients aged >65 admitted to Forth Valley Royal Hospital between December 2019 and January 2020 with a primary diagnosis of decompensated heart failure who met frailty criteria.

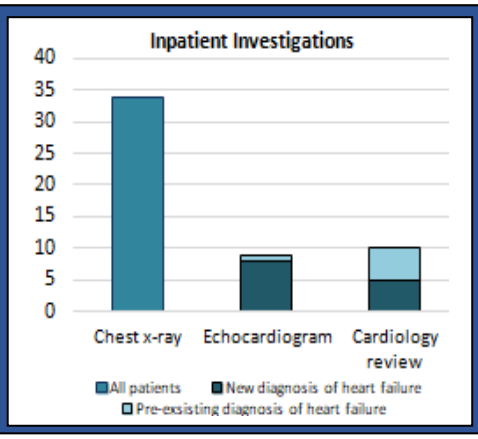
Patients were identified through screening discharge letters during the above time frame.

The full paper notes of patients fitting the review criteria were requested through medical records.

Details on their full admission, investigations, clinical management and outcomes were all documented alongside their medical history and Rockwood score.

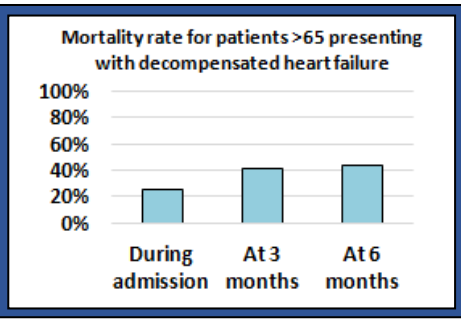
RESULTS

10% of medical admissions aged > 65 were frail with a primary diagnosis of decompensated heart failure.



All patients received a chest x-ray, 26% had an in-patient echocardiogram and 29% received a formal cardiology review by heart failure specialist nurses or cardiologist.

The average length of stay was 10 days. 62% required oxygen, 79% required Intravenous diuretics whilst the remaining 21% received oral diuretics.



The outcomes in this cohort of 34 patients were poor with a mortality rate of 26% during their admission, 41% at 3 months and 44% at six months.

A Rockwood score of 5 or above correlated with a higher mortality at 6 months at 65%.

68% of patients had advanced care plans with 24% having ReSPECT documentation and 68% having DNACPR.

CONCLUSIONS

The majority of frail patients with decompensated heart failure could not be initially managed in the community due to their need for intravenous diuretics and oxygen. There are also inconsistencies in cardiology input in this cohort.

For frail multi-morbid patients with heart failure, we plan to create and test a pathway for medical step-down to ECT. This could evolve to manage community dwelling heart failure patients in conjunction with the specialist team.

1-Ambarish P, et al. Frailty Among Older Decompensated Heart Failure Patients: Prevalence, Association With Patient-Centered Outcomes, and Efficient Detection. JACC: Heart Failure,Volume 7, Issue 12,2019.

Clinical Quality - CQ - Patient Safety [Poster]

Clinical Audit of Correct Completion of Certificates of Incapacity in Raigmore Hospital

H Bell, G Muir, C Waldie

Raigmore Hospital, Inverness

Background: An Adults with incapacity (AWI) certificate allows the healthcare team to act in the patient's best interest when they are unable to give consent. An audit of AWI forms was completed in Raigmore Hospital between November 2020 and February 2021. This was done to ensure current AWI documentation was completed correctly and legally.

Methods: AWI documentation was legally completed if section C (Certificate of Incapacity under section 47) was fully and accurately completed. If sections A-D were correctly completed the AWI document was considered fully complete. Audit cycle 1 included all active AWIs across 6 wards (n=40). Audit cycle 2 re-audited the same 6 wards, 3 months later (n=34), after interventions had been introduced.

Results:
No. of AWI Legally Complete Fully Complete
Cycle 1 (Nov 2020) 40 24 (60%) 12 (30%)
Cycle 2 (Feb 2021) 34 25 (73.5%) 13 (38%)
There was a 13% improvement in the legal completion and an 8% improvement in total completion of AWI documentation between the two audit cycles. Following Cycle 1, a mandatory teaching session for junior doctors detailing how to complete an AWI was provided. Posters with instructions on AWI completion were placed on the wards. Following Cycle 2, posters will be placed in the AWI form drawer and on the ward round trolley. AWI review will be a compulsory part of weekly team safety checks and AWI prompting has been encouraged throughout the MDT.

Conclusion: Our results show that AWI documentation is unreliably completed in Raigmore with 40% not being legally complete. After improving AWI education, 73.5% were legally complete. These interventions were successful and are easily transferrable to other hospitals as part of doctor induction. Instructional posters can be easily reproduced and displayed. We will complete a further Audit cycle in May to review the success of our interventions.

Adults With Incapacity

H. Bell, G. Muir, C. Waldie, A. Jamieson

Background

A Certificate of Incapacity under section 47 of the Adults with Incapacity (Scotland) Act 2000 is produced when a patient who is incapable of consenting to treatment requires management.
An AWI certificate allows the healthcare team to act in the patient's best interest without the patient's consent.[1]
Prior to the act, treatment of a patient without consent from either the patient or proxy decision maker, could be considered assault. Provided a certificate of incapacity is correctly completed and issued, and the general principles of the act are observed, treatment may now be given.[2]
A clinical audit of active AWI forms was completed in Raigmore Hospital between November 2020 and February 2021. This was done to ensure current AWI documentation in use in Raigmore hospital was completed correctly and legally, and to formulate plans to improve completion of these forms.

Method

AWI documentation was legally completed if section C (Certificate of Incapacity under section 47) was fully and accurately completed. If sections A D were correctly completed the AWI document was considered fully complete. Audit cycle 1 included all active AWIs across 6 wards (n=40). Audit cycle 2 re audited the same 6 wards, 3 months later (n=34), after interventions had been introduced.

Results

Following the first cycle, a teaching session for junior doctors detailing how to complete an AWI was given during mandatory teaching. Posters with instruction on AWI completion and helpful diagrams were placed on the wards.

	No. of AWI	Legally Complete	Fully Complete
Cycle 1 (Nov 2020)	**40**	**24** (60%)	**12** (30%)
Cycle 2 (Feb 2021)	**34**	**25** (73.5%)	**13** (38%)

There was a 13% improvement in the legal completion and an 8% improvement in total completion of AWI documentation between the two audit cycles.

Conclusion & Next Steps

Our results show that AWI documentation is unreliably completed in Raigmore with 40% not being legally complete prior to intervention.
After improving AWI education, 73.5% were legally complete.
These interventions were successful and are easily transferable to other hospitals as part of doctor induction. Instructional posters can be easily reproduced and displayed.
Recommendations for further projects include posters being placed in the AWI form drawer and on the ward round trolley.
AWI review could also be prompted in ward safety checks, as well as in MDT meetings.

1. Adults with Incapacity (Scotland) Act 2000 [Internet]. Legislation.gov.uk. 2000 [cited 11 April 2021]. Available from: https://www.legislation.gov.uk/asp/2000/4/contents

2. Adults with incapacity: code of practice for medical practitioners - gov.scot [Internet]. Gov.scot. 2010 [cited 11 April 2021]. Available from: https://www.gov.scot/publications/adults-incapacity-scotland-act-2000-code-practice-third-edition-practitioners-authorised-carry-out-medical-treatment-research-under-part-5-act/pages/2/

Clinical Quality - CQ - Clinical Effectiveness [Poster]

Management of Hypernatraemia in Elderly patients. Quality improvement project conducted in Elderly wards at UHL LRI.

Naureen Khalid ST7 , Farah Shahid ST4, Dr James Reid Consultant Geriatrician.

University Hospitals of Leicester, Leicester Royal Infirmary

Introduction; Hypernatremia in the geriatric population is associated with significant morbidity and mortality. Our aim to improve the management of hypernatremia in the elderly population

METHOD: 2 cycles were conducted with 2 interventions in geriatric wards.
CYCLE 1: Jan 2018-Oct'18
• 30 patient with Hypernatraemia in geriatric wards were selected from August to October 2016
• Patients with serum sodium >145 mmol/l at presentation were reviewed retrospectively
• Monitored:1) rate of correction of serum sodium 2) type of fluids prescribed 3) Evidence of calculation of estimating the water deficit 4) Frequency of serum sodium measurement
• Discussed audit findings in biochemistry meeting and Geriatric meeting.
• 1st intervention: Introduction of UHL hypernatraemia guidelines and re-audited.

Cycle2: April'19-July'19
• Patients with sodium >150 in 5 elderly care wards selected as per biochemistry alert. Estimated water deficit, fluid choice and amount of fluid given reviewed.
• 2nd Intervention: Introduced hypernatremia guidelines sticker in patient case notes, training to junior doctors given on individual basis. Audited before and after.

Result: There has been a dramatic change in results after the introduction of UHL hypernatraemia guideline and further improvement had been noted after introduction of hypernatraemia management stickers in patient's notes. 1) Fluid choice was appropriate in 50% of patient which improved to 70%. 2) Appropriate amount of fluid given was appropriate only in 20% of patients in 1st cycle improved to 55% after 1st cycle and 64%fater 2nd Cycle. 3) Only half of the patients had appropriate sodium monitoring which significantly improved to 85% after 2nd intervention.
CONCLUSION: Appropriate management of hypernatraemia can improve mortality. Discussion in biochemistry helped to identify patients with hypernatraemia in 2nd round. Both interventions made a real difference in management of high sodium. This QIP won Elderly Medicine speciality award in UHL Clinical Audit Improvement Awards 2020

Management of Hypernatremia In Elderly QIP

Dr N Khalid & Dr F Shahid, Specialist Trainees Geriatric Medicine. Dr J Reid Consultant Geriatrician University Hospitals of Leicester.

INTRODUCTION:

Hypernatremia in the geriatric population is associated with significant morbidity and mortality(**1).** Our aim to improve the management of hypernatremia in the elderly population.

AIM: 1)To improve the management of hypernatremia in the elderly population.

2)To ensure that the UHL guidelines for hypernatremia is being followed by the organization.

OBJECTIVES: To study patients admitted with high sodium and their fluid management.

METHOD:

2 Cycles were conducted with 2 interventions in Geriatric wards at UHL. Monitored:1) rate of correction of serum sodium 2) type of fluids prescribed 3) Frequency of serum sodium measurement

CYCLE 1: JAN 2018-OCT'18:

30 patients with Hypernatraemia in geriatric wards were selected

Patients with serum sodium >145 mmol/l at presentation were reviewed retrospectively. **Discussed audit findings in biochemistry meeting and Geriatric meeting.**

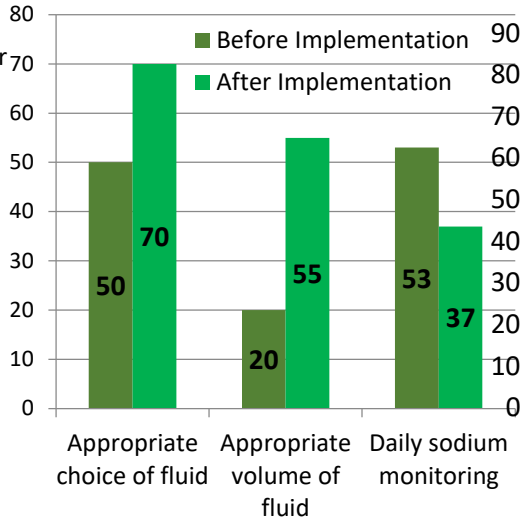
1st intervention: Introduction of UHL hypernatremia guidelines and re-audited.

2nd Intervention: Introduced hypernatremia guidelines sticker in patient case notes.

RESULTS in %

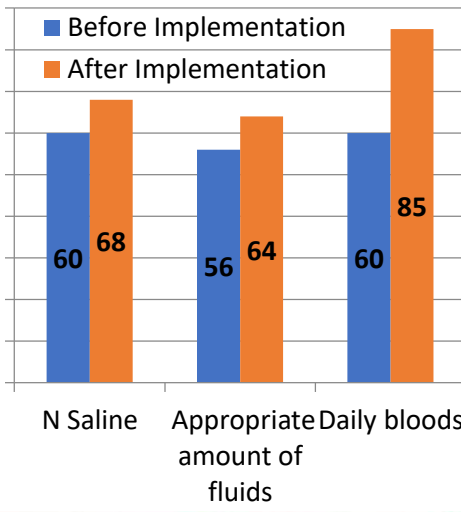
Appropriate type of fluid was given in more than half of the patients and appropriate volume of fluid was given in nearly half the patients.

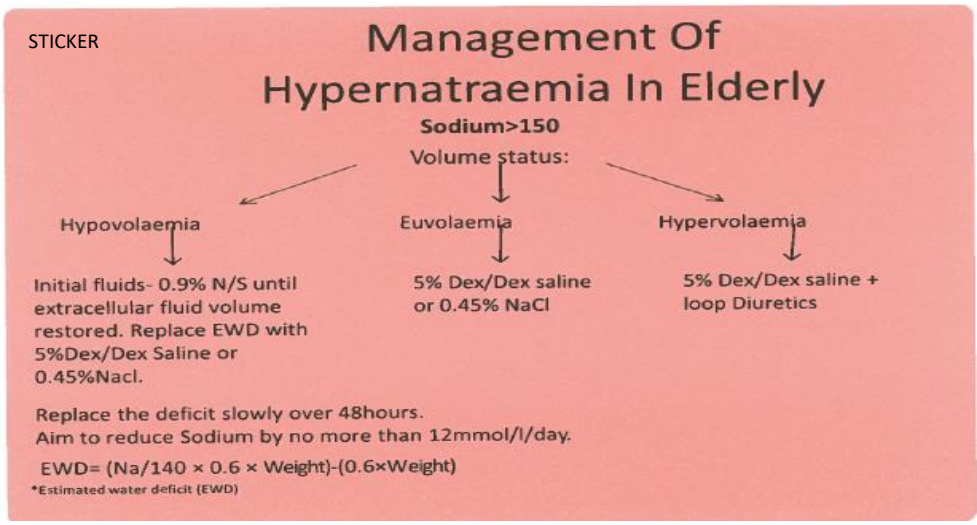
Sodium monitoring was affected due to a large number of patients being EOL/ACP



CYCLE 2: APRIL-JULY'19

Patients with sodium >150 in 5 Elderly care wards selected as per biochemistry alert.Estimated water deficit, fluid choice and amount given.1) 24 Patients selected.2)Mean age 85 yrs old.3)Sodium above 150mmol/l.





RESULT: There has been a dramatic change after the introduction of UHL hypernatremia guideline and further improvement had been noted after introduction of hypernatremia management stickers in patient's notes.

CONCLUSION: Appropriate management of hypernatremia can improve mortality. Discussion in biochemistry meeting helped to identify patients with hypernatremia in 2nd round.

Both interventions made a real difference in management of hypernatremia in elderly patients. **This QIP won Medicine speciality award in the UHL Clinical Audit Improvement Awards 2020.**

REFERENCES: Clin Interv Aging. 2014; 9: 1987–1992. Hypernatremia in the elderly. J Natl Med Assoc. 2002 Aug; 94(8): 701–705. Adrogué HJ, Madias NE. Hypernatremia. N Engl J Med. 2000 ;342(20):1493–1499.Aug; 94(8): 701–705

Scientific Presentation - SP - Falls (Falls, fracture & trauma) [Poster]

Lower muscle strength and muscle size may predispose older people with frailty to fragility fractures

Eleanor Lunt; Adam L Gordon; Paul Greenhaff; John R Gladman

Nottingham University Hospitals NHS Trust; NIHR Nottingham Biomedical Research Centre, UK; Division of Rehabilitation, Ageing and Wellbeing, University of Nottingham, UK; Division of Medical Sciences and Graduate Entry Medicine, University of Nottingham, UK; Division of Physiology, Pharmacology and Neuroscience, University of Nottingham, UK; MRC – Versus Arthritis Centre for Musculoskeletal Ageing Research, University of Nottingham, UK; NIHR ARC East Midlands, UK

Introduction: Sarcopenia, the loss of muscle mass and strength, is known to be a component of physical frailty. Yet, the extent of its contribution is unclear. Ultrasound has good validity for assessing muscle size (Franchi 2018) and can be used at the bedside in clinical situations, but evidence of its use in older people with frailty is scarce. This study evaluated the extent of loss in muscle size and strength with frailty, by comparing older people with clinical frailty to non-frail healthy older controls.

Methods: Handgrip strength (HGS), knee extensor strength (KES), vastus lateralis muscle thickness (VLMT; ultrasound) and cross-sectional area (VLCSA; ultrasound) were measured within the first few days of hospital admission, in 36 clinically frail women aged ≥70 with an acute fragility limb fracture. 11 female healthy, non-frail, non-hospitalised volunteers with comparable BMI and aged ≥70 were recruited for comparison. Values represent mean±SD. Independent t-tests were used to establish differences between groups.

Results: At the time of hospital admission, female patients were older (84±7years vs. 77±6years, $p<0.05$), weaker (HGS of 9.2±4.7kg vs. 19.9±5.8kg, $p<0.001$; KES 4.5±1.5kg vs. 7.8±1.3kg, $p<0.001$), had lower VLMT (1.38±0.47cm vs. 1.75±0.30cm, $p=0.005$) and lower VLCSA (8.92±4.37cm2 vs. 13.35±3.97cm2, $p=0.005$) than female, non-frail controls. HGS (β=-0.55: 95%CI=-0.17,-0.06), KES (β=-0.43: 95%CI=-0.51,-0.11), VLMT (β=-0.53: 95%CI=-2.73,-0.65) and VLCSA (β=-0.52: 95%CI=-0.27,-0.06) were significantly associated with increased FRAIL score, after adjusting for confounders (age and weight).

Discussion: Older patients admitted with fragility fractures were weaker and had a lower VLMT compared to healthy, non-frail older people, suggesting that the falls leading to hospital admission were likely to be due to pre-existing sarcopenia and weakness. Increasing FRAIL score associated with lower muscle strength and lower muscle size. This emphasises the importance of population level community interventions to prevent muscle deterioration by encouraging activity and exercise in those at risk of frailty.

University of Nottingham
UK | CHINA | MALAYSIA

Older people with fragility fractures have low muscle strength and muscle size

Eleanor Lunt 1,2, Adam L Gordon 1,3,6, Paul Greenhaff 1,4,5, John R Gladman 1,2,6

1 NIHR Nottingham Biomedical Research Centre, UK; 2 Division of Rehabilitation, Ageing and Wellbeing, University of Nottingham, UK; 3 Division of Medical Sciences and Graduate Entry Medicine, University of Nottingham, UK; 4 Division of Physiology, Pharmacology and Neuroscience, University of Nottingham, UK; 5 MRC – Versus Arthritis Centre for Musculoskeletal Ageing Research, University of Nottingham, UK; 6 NIHR ARC East Midlands, UK

Introduction

Both frailty and sarcopenia are associated with increasing age, and adverse outcomes such as falls and fragility fractures. Sarcopenia, the loss of muscle mass and strength, is known to be a component of physical frailty. Yet, the extent of its contribution is unclear. This study evaluated the extent of loss in muscle size and strength in older people frailty, by comparing older people with clinical frailty to non-frail healthy older controls.

Methods

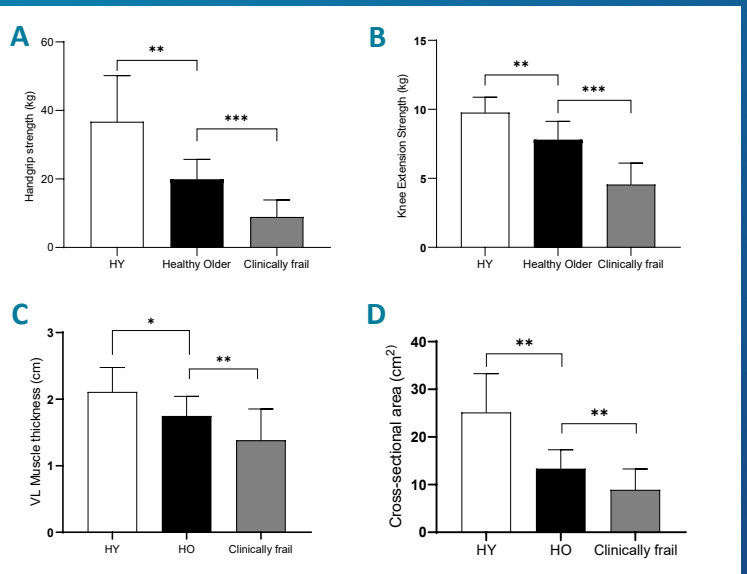
Handgrip strength (HGS), knee extensor strength (KES), *vastus lateralis* muscle thickness (VLMT; ultrasound) and cross-sectional area (VLCSA; ultrasound) were measured within the first few days of hospital admission, in 36 clinically frail women aged ≥70 with an acute fragility limb fracture. They were compared with 11 female healthy, non-frail, non-hospitalised volunteers (HO) with comparable BMI and aged ≥70 for frailty effects. 11 female healthy young volunteers (HY) aged 26-35 years, were also recruited for comparison of age differences. Values represent mean±SD. Independent t-tests were used to establish differences between groups (HY vs. HO, and HO vs. clinically frail)

Results

Effects of Age: The healthy older (HO) were weaker (HGS of 19.9±5.8kg vs. 36.7±13.5kg, p=0.002; KES of 7.8±1.3kg vs. 9.8±1.1kg, p=0.001) and had lower VLMT (1.75±0.29cm vs. 2.12±0.33cm p=0.011) and lower VLCSA (13.35±3.97cm^2 vs. 25.14±8.16cm^2 p=0.001) than healthy young (HY), replicating known effects associated with ageing.

Effects of frailty: At the time of hospital admission, female patients were weaker (HGS of 9.2±4.7kg vs. 19.9±5.8kg, p<0.001; KES 4.5±1.5kg vs. 7.8±1.3kg, p<0.001), had lower VLMT (1.38±0.47cm vs. 1.75±0.30cm, p=0.005) and lower VLCSA (8.92±4.37cm^2 vs. 13.35±3.97cm^2, p=0.005) than female, non-frail controls.
Clinically frail patients were older (84±7years vs. 77±6years, p<0.05) than healthy volunteers. After adjustment for age, muscle strength measures (HGS & KES) remained significantly lower in the clinically frail.

Key for graphs: A: handgrip strength (HGS); B: knee extension strength (KES); C: VL muscle thickness; D: VL cross-sectional area. *p<0.05, **p<0.01, ***p<0.001



Conclusions

Older patients admitted with fragility fractures were weaker and had a lower VLMT compared to healthy, non-frail older people, suggesting that the falls leading to hospital admission were likely to be due to pre-existing sarcopenia and weakness. This emphasises the importance of population level community interventions to prevent muscle deterioration by encouraging activity and exercise in those at risk of frailty.

Clinical Quality - CQ - Clinical Effectiveness [Poster]

Out Of Programme Experience: Cardio-Geriatric medicine and Clinical Leadership

J Giddings1, CJ Miller1, L Clayton2, D Lakhani1, A Boyle3, S Anniss4, WI Loke2

1Department of Geriatric Medicine, University Hospitals of Leicester NHS Trust 2Department of Cardiology, University Hospitals of Leicester NHS Trust 3Leicestershire Partnership Trust 4The Central Surgery Oadby

Introduction: Cardiovascular disease is a leading cause of morbidity and mortality in the elderly. The 'Cardio-geriatrician' can, arguably, deliver better patient centred care for this cohort.

Method: A 12 month out of programme experience (OOPE) was created in collaboration with Health Education England across the East Midlands (HEE-EM) with the working week split equally between clinical and academic time. Clinical work is undertaken at a Tertiary Cardiology centre whilst academic time is spent working towards attainment of a post graduate certificate (PGCert) qualification in Clinical Leadership and Management, and on Quality Improvement Projects (QIP), within Primary and Secondary care.

Results: Clinical leadership skills have been developed through the invention, design and delivery of QIPs. The work undertaken through attainment of the PGCert qualification has allowed better understanding of clinical leadership theory thus helping with 'real world' projects. The post has provided experience in: Heart failure Multi-disciplinary team (MDT) working; Transcatheter Aortic Valve Implantation (TAVI) MDT working; Coronary Care and cardiology in-patient working. Quality Improvement Projects (QIPs) have identified the benefit of increasing awareness of Frailty & Rehabilitation goals for older patients in such settings which are usually managed by specialists in isolation. For the post holder, clinical skills are further developed by working in MDTs across traditional speciality boundaries.

Conclusions: Although such experience is included in the required competencies of the Geriatric's & Generalist's curriculum, this level of exposure is not routinely available and has provided invaluable experience and better understanding of up-to-date approaches for complex diseases in a multi-morbidity elderly population. At the same time, a holistic Geriatricians' perspective has been well received and appears to have qualitative merit which is still being evaluated. It is well recognised that Geriatric liaison services are vital to improve clinical outcomes for older patients and Cardio-geriatricians will have role to play.

Out Of Programme Experience: Cardio-Geriatric medicine and Clinical Leadership

J Giddings[1], CJ Miller[1], L Clayton[2], DR Lakhani[1], A Boyle[3], S Anniss[4], WI Loke[2]

[1]Department of Geriatric Medicine, University Hospitals of Leicester NHS Trust, [2]Department of Cardiology, University Hospitals of Leicester NHS Trust, [3]Leicestershire Partnership Trust, [4]The Central Surgery Oadby

Background

Cardiovascular disease is a leading cause of morbidity and mortality in older people. The 'Cardio-geriatrician' can, arguably, enhance the quality of care for this cohort.

Objectives

- To gain training in Cardiovascular medicine to a depth greater than that which is routinely offered to Geriatric medicine trainees
- Quality and service improvement project work focussed on heart failure management in older patients
- Post Graduate Certification in Clinical Leadership & Management

Method

A 12 month out of programme experience (OOPE) has been formulated in collaboration with Health Education England (East Midlands)

The working week is split equally between clinical and academic work.

Clinical work is undertaken in a Cardiology Tertiary Referral Centre, specifically the Heart Failure team and on the Coronary Care Unit (CCU).

Academic time is spent working towards attainment of a post graduate certificate (PGCert) qualification in Clinical Leadership and Management, and on Quality Improvement Projects across Primary and Secondary care.

Results

Academic work has encouraged clinical leadership skills development.

Working toward a PGCert qualification has ensured a better understanding of clinical leadership theory which has helped in the formulation and delivery of Quality Improvement Projects (QIPs) in both Primary and Secondary care.

- Utilising 'in-house' services within a local GP surgery to ensure heart failure patients are in receipt of personalised, evidence-based care.
- Secondary care project data illustrates a relationship between frailty and admissions secondary to chronic heart failure. Work is on-going to improve awareness of frailty and management of older persons by non-Geriatricians to encourage the formulation of holistic care plans.

This post has provided many cross-speciality learning opportunities.

- Heart failure Multi-disciplinary team (MDT) working;
- Transcatheter Aortic Valve Implantation (TAVI) MDT working;
- Coronary Care and cardiology in-patient working;
- Device insertion, Angiography and Ablation in Cath lab
- Heart failure clinics
- Introduction to Echocardiography, including Transoesophageal
- Frailty/Nursing home reviews undertaken in primary care during the pandemic

For the post holder, clinical skills are further developed by working in MDTs across traditional speciality boundaries.

Figure illustrating the themes/topics encountered during the OOPE

Conclusions

Although such experience is included in the required competencies of the Geriatric's & Generalist's curriculum, this level of exposure is not routinely available and has provided invaluable experience and a better understanding of up-to-date approaches for complex diseases in multi-morbid older people.

At the same time, a holistic Geriatricians' perspective has been well received and appears to have qualitative merit which is still being evaluated. It is well recognised that Geriatric liaison services are vital to improve clinical outcomes for older patients and Cardio-geriatricians will have a role to play.

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

Deconditioning – A study of the physiological and psychological impact on hospital patients

Dr. Jiya Liz Peter

Barking, Havering and Redbridge University Hospitals NHS Trust

Effects
-Musculoskeletal effects: Diminished muscle mass, decrease of muscle strength by two to five percent per day, muscle shortening etc [1]
-Bedsores caused by extended periods of inactivity
-Psychological effects like delirium, depression, loss of confidence etc
-Cardiovascular system effects like postural hypotension, venous thromboembolism risk etc
-Problems with continence

Management
-Red2Green: This is a management system developed by Dr Ian Sturgess, which aids in identifying delays or progresses in a patients journey. The vision behind this system is to ensure that all patient related plans are driven in a timely manner. Each patient is assigned to a colour code, which makes it possible to visually interpret priorities. [2]
-"End PJ Paralysis" & "Sit Up, Get Dressed and Keep Moving!" campaigns: These phrases are thought-provoking and play an important role in a patients' wellbeing. Where applicable, patients should be encouraged to sit up rather than lying down, groom themselves and stay physically active. This ensures that patients feel good about themselves, both physically and psychologically.

Conclusion
Our geriatric patients are extremely vulnerable to deconditioning, but this can be mitigated. We need to ensure that patients are physically and psychologically active. This might involve simple encouraging steps like accompanying the patient for a short walk across the ward, social interactions and most importantly aiming to shorten their hospital stay where possible.

Deconditioning – A study of the physiological and psychological impact on hospital patients

Dr. Jiya Liz Peter (MBBS) | Clinical Fellow - Geriatrics | Barking, Havering and Redbridge University Hospitals NHS Trust

Introduction

Deconditioning is a lesser known subject that factors the physiological as well as psychological impact on an individual. While deconditioning could occur anywhere, it is quite commonly observed during a hospital admission. Imagine yourself admitted in a hospital, lying in bed staring at the white paint, with limited social interaction and watching other ill patients around you. Unfortunately, this is a reality that our patients may endure, and the way they feel has a significant impact on their recovery.

Effects of deconditioning

- Musculoskeletal effects: Diminished muscle mass, decrease of muscle strength by two to five percent per day, muscle shortening etc [1]
- Bedsores caused by extended periods of inactivity
- Psychological effects like delirium, depression, loss of confidence etc
- Cardiovascular system effects like postural hypotension, venous thromboembolism risk etc
- Problems with continence

Prevention and management

- **Red2Green**: This is a management system developed by Dr Ian Sturgess, which aids in identifying delays or progresses in a patients journey. The vision behind this system is to ensure that all patient related plans are driven in a timely manner. Each patient is assigned to a colour code, which makes it possible to visually interpret priorities. [2]
- **"End PJ Paralysis" & "Sit Up, Get Dressed and Keep Moving!" campaigns**: These phrases are thought-provoking and play an important role in a patients' wellbeing. Where applicable, patients should be encouraged to sit up rather than lying down, groom themselves and stay physically active. This ensures that patients feel good about themselves, both physically and psychologically.

Conclusion

Our geriatric patients are extremely vulnerable to deconditioning, but this can be mitigated. We need to ensure that patients are physically and psychologically active. This might involve simple encouraging steps like accompanying the patient for a short walk across the ward, social interactions and most importantly aiming to shorten their hospital stay where possible.

References

1.https://pubmed.ncbi.nlm.nih.gov/16121472/#:~:text=The%20most%20predictable%20effects%20of,leg%20strength%20that%20seriously%20limit
2. https://improvement.nhs.uk/news-alerts/5-reasons-why-we-are-fully-behind-red2green-approach/
3. https://endpjparalysis.org/
4. https://www.bgs.org.uk/policy-and-media/%E2%80%98sit-up-get-dressed-and-keep-moving%E2%80%99