Orthogeriatrics

Current Awareness Newsletter

December 2014
Outreach

The Library can help facilitate evidence-based practise for all members of staff, as well as assisting with academic study and research. We can help with literature searching, obtaining journal articles and books, and setting up individual current awareness alerts.

Literature Searching

We provide a literature searching service for any library member. For those embarking on their own research it is advisable to book some time with one of the librarians for a 1 to 1 session where we can guide you through the process of creating a well-focused literature research and introduce you to the health databases access via NHS Evidence.

Critical Appraisal Training

We also offer one-to-one or small group training in literature searching, accessing electronic journals, and critical appraisal/Statistics. These are essential courses that teach how to interpret clinical papers.

Books

Books can be searched for using SWIMS our online catalogue at www.swims.nhs.uk. Books and journals that are not available on site or electronically may be requested from other locations. Please email requests to: library@uhbristol.nhs.uk
Contents

1: Table of Contents from Age and Ageing
   Bone and Joint Journal (UK)
   Osteoporosis International

2: New NICE Guidance

3: Latest relevant Systematic Reviews from the Cochrane Library.

4: NHS Behind the Headlines

5: New activity in Uptodate

6: Festive Reading

6: This month’s PICU Lit Searches

7: Current Awareness database articles
Table of Contents from Age and Ageing November 2014

If you require the full-text of any of the articles below then please email library@uhbristol.nhs.uk

Title: Editor's view
Citation: Age and Ageing, November 2014, 43(6): 735

Title: Sarcopenia the new geriatric giant: time to translate research findings into clinical practice.
Citation: Age & Ageing, November 2014, 43(6): 736-737
Author(s): Schoenenberger, Andreas W., Stuck, Andreas E.

Title: Survival in the elderly after acute myocardial infarction: room for more improvement
Citation: Age & Ageing, November 2014, 43(6): 739-740
Author(s): Mangion, K., Berry, C.

Title: The importance of detecting and managing comorbidities in people with dementia?
Citation: Age & Ageing, November 2014, 43 (6): 741-743
Author(s): Fox, C., Smith, T., Maidment, I.

Title: Editor's Choice: Best practice guidelines for the management of frailty: a British Geriatrics Society, Age UK and Royal College of General Practitioners report
Citation: Age & Ageing, November 2014, 43 (6): 744-747
Author(s): Turner, B., Clegg, A.

Citation: Age & Ageing, November 2014, 43 (6): 748-759
Author(s): Cruz-Jentoft, A., Landi, Francesco, L., Schneider, S., Zuniga, C.

Title: A systematic review of outcomes following emergency transfer to hospital for residents of aged care facilities
Citation: Age & Ageing, November 2014, 43 (6): 759-766
Author(s): Dwyer, R., Gabbe, B., Stoelwinder, J.

Title: Potentially inappropriate drug use among hospitalised older adults: results from the CRIME study
Citation: Age & Ageing, November 2014, 43 (6): 767-773
Author(s): Tosato, M., Landi, F., Martone, A. Cherubini, A.

Title: Specifying ICD9, ICPC and ATC codes for the STOPP/START criteria: a multidisciplinary consensus panel
Citation: Age & Ageing, November 2014, 43 (6): 773-778
Author(s): de Groot, D., de Vries, M., Jolting, K.

Title: Age-dependent improvements in survival after hospitalisation with acute myocardial infarction: an analysis of the Myocardial Ischemia National Audit Project (MINAP)
Citation: Age & Ageing, November 2014, 43 (6): 779-785
Author(s): Alabas, O., Allan, V., McLenachan, J.

Title: National audit of continence care: adherence to National Institute for Health and Clinical Excellence (NICE) Guidance in older versus younger adults with faecal incontinence
Citation: Age & Ageing, November 2014, 43 (6): 785-793
Author(s): Harari, D., Husk, J., Lowe, D.

Title: Cost-effectiveness of telecare for people with social care needs: the Whole Systems Demonstrator cluster randomised trial
Citation: Age & Ageing, November 2014, 43 (6): 794-800
Author(s): Henderson, C., Knapp, M., Fernandez, J., Beecham, J.

Title: Prevalence and predictors of bedrail use in an acute hospital
Citation: Age & Ageing, November 2014, 43 (6): 801-805
Author(s): Flatharta, T., Haugh, J., Robinson, J.

Title: Relationships between physical performance and knee and hip osteoarthritis: findings from the European Project on Osteoarthritis (EPOSA)
Citation: Age & Ageing, November 2014, 43 (6): 806-813
Author(s): Edwards, M., van der Pas, S., Denkinger, M.

Title: Effects of functional tasks exercise on older adults with cognitive impairment at risk of Alzheimer’s disease: a randomised controlled trial
Citation: Age & Ageing, November 2014, 43 (6): 813-820
Author(s): Law, L., Barnett, F., Yau, M.

Title: New-onset hyponatraemia after surgery for traumatic hip fracture
Citation: Age & Ageing, November 2014, 43 (6): 821-826
Author(s): Rudge, J., Kim, D.

Title: Association of renal function with vascular stiffness in older adults: the Rotterdam study
Citation: Age & Ageing, November 2014, 43 (6): 827-833
Author(s): Sedahgat, S., Dawkins Arce, F., Verwoert, G.

Title: Renal function and decline in functional capacity in older adults
Citation: Age & Ageing, November 2014, 43 (6): 833-838
Author(s): Chin, H., Ahn, S., Ryu, J., Kim, Sejoong.

Title: Association between estimated glomerular filtration rate and clinical outcomes in patients with acute ischaemic stroke: results from China National Stroke Registry
Citation: Age & Ageing, November 2014, 43 (6): 839-845
Author(s): Wang, X., Wang, Y., Wang, C.

Title: More attention to pain management in community-dwelling older persons with chronic musculoskeletal pain
Citation: Age & Ageing, November 2014, 43 (6): 845-850
Author(s): Karttunen, N., Turunen, J., Ahonen, R.

Title: Pharmacological management of pain in Australian Aged Care Facilities
Citation: Age & Ageing, November 2014, 43 (6): 851-856
Author(s): Veal, F., Bereznicki, L., Thompson, A., Peterson, G.
Title: Appendicular skeletal muscle in hospitalised hip-fracture patients: development and cross-validation of anthropometric prediction equations against dual-energy X-ray absorptiometry
Citation: Age & Ageing, November 2014, 43 (6): 857-862
Author(s): Villani, A., Crotty, M., Cameron, I., Kurrle, S.

Title: High frequency of potential entrapment gaps in beds in an acute hospital
Citation: Age & Ageing, November 2014, 43 (6): 862-865
Author(s): Haugh, J., Flatharta, T., Griffin, T.

Title: Public and patient research priorities for orthostatic hypotension
Citation: Age & Ageing, November 2014, 43 (6): 865-868
Author(s): Frith, J., Bashir, A., Elliott, C., Newton, J.

Title: Systematic review investigating the reporting of comorbidities and medication in randomized controlled trials of people with dementia
Citation: Age & Ageing, November 2014, 43 (6): 868-872
Author(s): Smith, T., Maidment, I., Hebding, J., Madzima, T.

Title: Compliance with trial registration in five core journals of clinical geriatrics: a survey of original publications on randomised controlled trials from 2008 to 2012
Citation: Age & Ageing, November 2014, 43 (6): 872-876
Author(s): Mann, E., Nguyen, N., Fleischer, S.

Title: Palato-pharyngo-laryngeal myoclonus ... an unusual cause of dysphagia
Citation: Age & Ageing, November 2014, 43 (6): 877-879
Author(s): Juby, A., Shandro, P., Emery, D.

Title: Syringomyelia in an older patient
Citation: Age & Ageing, November 2014, 43 (6): 880-881
Author(s): Gill, R., Birns, J.

Table of Contents from The Bone and Joint Journal (UK) November 2014

If you require the full-text of any of the articles below then please email library@uhbristol.nhs.uk

Title: The journey continues
Citation: Greenwald, A.
Author(s): Bone and Joint Journal, November 2014, 96-B: 5

Title: Advances in pain management: game changers in knee arthroplasty
Citation: Bone and Joint Journal, November 2014, 96-B: 7-9
Author(s): Berend, M., Berend, K., Lombardi, A.

Title: Cartilage restoration of the hip using fresh osteochondral allograft: resurfacing the potholes
Citation: Bone and Joint Journal, November 2014, 96-B: 11-16
Author(s): Khanna, V., Tushinski, D., Drexler, M., Backstein, D.

Title: Metal-on-metal hip surface replacement: the routine use is not justified
Citation: Dunbar, M., Prasad, V., Weerts, B.

Author(s): Bone and Joint Journal, November 2014, 96-B: 17-21

Title: Large diameter femoral heads: is bigger always better?
Citation: Bone and Joint Journal, November 2014, 96-B: 23-26

Author(s): Cooper, H., Della Valle, C.

Title: The neuromuscularly challenged patient: total hip replacement is now an option
Citation: Bone and Joint Journal, November 2014, 96-B: 27-31

Author(s): Kraay, M., Bigach, S.

Title: A mini-anterior approach to the hip for total joint replacement: optimising results: improving hip joint replacement outcome
Citation: Bone and Joint Journal, November 2014, 96-B: 32-35

Author(s): Mirza, A., Lombardi, A., Morris, M., Berend, K.

Title: Acetabular distraction: an alternative for severe acetabular bone loss and chronic pelvic discontinuity
Citation: Bone and Joint Journal, November 2014, 96-B: 36-42

Author(s): Sheth, N., Melnic, C., Paprosky, W.

Title: Femoral neck fractures: a changing paradigm
Citation: Bone and Joint Journal, November 2014, 96-B: 43-47

Author(s): Su, E., Su, S.

Title: Periprosthetic fractures: bespoke solutions
Citation: Bone and Joint Journal, November 2014, 96-B: 48-55

Author(s): Yasen, A., Haddad, F.

Title: Non-modular tapered fluted titanium stems in hip revision surgery: gaining attention
Citation: Bone and Joint Journal, November 2014, 96-B: 56-59

Author(s): Konan, S., Garbuz, D., Masri, B.

Title: The challenge of methicillin resistant staphylococcal infection after total hip replacement: overlooked or overstated?
Citation: Bone and Joint Journal, November 2014, 96-B: 60-65

Author(s): Parry, M., Duncan, C.

Title: Partial two-stage exchange of the infected total hip replacement using disposable spacer moulds
Citation: Bone and Joint Journal, November 2014, 96-B: 66-69

Author(s): Lombardi, A., Berend, K., Adams, J.

Title: The revision acetabulum – allograft and bone substitutes: vestigial organs for bone deficiency
Citation: Bone and Joint Journal, November 2014, 96-B: 70-72

Author(s): Callaghan, J., Liu, S., Phruetthiphat, O.

Title: Acetabular distraction: an alternative approach to pelvic discontinuity in failed total hip replacement
Citation: Bone and Joint Journal, November 2014, 96-B: 73-77
Author(s): Brown, N., Hellman, M., Haughom, B., Shah, R.

Title: Soft-tissue and alignment correction: the use of smart trials in total knee replacement
Citation: Bone and Joint Journal, November 2014, 96-B: 78-83
Author(s): Gustke, K.

Title: Avoiding patellar complications in total knee replacement
Citation: Bone and Joint Journal, November 2014, 96-B: 84-86
Author(s): Russell, R., Huo, M., Jones, R.

Title: Cementless total knee replacement fixation: a contemporary durable solution-affirms
Citation: Bone and Joint Journal, November 2014, 96-B: 87-92
Author(s): Kwong, L., Nielsen, E., Ruiz, D.

Title: The role of hinges in primary total knee replacement
Citation: Bone and Joint Journal, November 2014, 96-B: 93-95
Author(s): Gehrke, T., Kendoff, D., Haasper, C.

Title: Patient dissatisfaction following total knee replacement: a growing concern?
Citation: Bone and Joint Journal, November 2014, 96-B: 96-100
Author(s): Nam, D., Nunley, R.

Title: Why knee replacement fail in 2013: patient, surgeon, or implant?
Citation: Bone and Joint Journal, November 2014, 96-B: 101-104
Author(s): Lombardi, A., Berend, K., Adams, J.

Title: The problem total knee replacement: systematic, comprehensive and efficient evaluation
Citation: Bone and Joint Journal, November 2014, 96-B: 105-111
Author(s): Vince, K.

Title: The unstable knee: wobble and buckle
Citation: Bone and Joint Journal, November 2014, 96-B: 112-114
Author(s): Abdel, M., Haas, S.

Title: Cemented stems: a requisite in revision total knee replacement
Citation: Bone and Joint Journal, November 2014, 96-B: 115-117
Author(s): Mullaji, A., Shetty, G.

Title: Porous metal metaphyseal cones for severe bone loss: when only metal will do
Citation: Bone and Joint Journal, November 2014, 96-B: 118-121
Author(s): Lachiewicz, P., Watters, T.

Title: The multiply-operated total knee replacement patient: salvage options
Citation: Bone and Joint Journal, November 2014, 96-B: 122-124
Author(s): Haidukewych, G., Petrie, J., Adigweme, O.
Table of Contents from Osteoporosis International November 2014

If you require the full-text of any of the articles below then please email library@uhbristol.nhs.uk

Title: Management of osteoporosis of the oldest old.
Citation: Osteoporosis International, November 2014, 25(11): 2507-29
Author(s): Rizzoli R, Branco J, Brandi ML, Boonen S, Bruyere O, Cacoub P, Cooper C, Diez-Perez A.
Abstract: This consensus article reviews the diagnosis and treatment of osteoporosis in geriatric populations. Specifically, it reviews the risk assessment and intervention thresholds, the impact of nutritional deficiencies, fall prevention strategies, pharmacological treatments and their safety considerations, the risks of sub-optimal treatment adherence and strategies for its improvement. INTRODUCTION: This consensus article reviews the therapeutic strategies and management options for the treatment of osteoporosis of the oldest old. This vulnerable segment (persons over 80 years of age) stands to gain substantially from effective anti-osteoporosis treatment, but the under-prescription of these treatments is frequent.

Title: Erratum to: Management of osteoporosis of the oldest old.
Citation: Osteoporosis International, November 2014, 25(11): 2531
Author(s): Rizzoli R, Branco J, Brandi ML, Boonen S, Bruyere O, Cacoub P, Cooper C, Diez-Perez A.

Title: Goal-directed treatment of osteoporosis in Europe.
Citation: Osteoporosis International, November 2014, 25(11): 2533-43
Author(s): Kanis JA, McCloskey E, Branco J, Brandi ML, Dennison E, Devogelaer JP, Ferrari S, Kaufman JM.
Abstract: Despite the proven predictive ability of bone mineral density, Fracture Risk Assessment Tool (FRAX), bone turnover markers, and fracture for osteoporotic fracture, their use as targets for treatment of osteoporosis is limited. INTRODUCTION: Treat-to-target is a strategy applied in several fields of medicine and has recently become an area of interest in the management of osteoporosis. Its role in this setting remains controversial. This article was prepared following a European Society for Clinical and Economic Aspects of Osteoporosis and Osteoarthritis (ESCEO) working group meeting convened under the auspices of the International Osteoporosis Foundation (IOF) to discuss the feasibility of applying such a strategy in osteoporosis in Europe.

Title: Low serum concentrations of alpha-tocopherol are associated with increased risk of hip fracture. A NOREPOS study.
Citation: Osteoporosis International, November 2014, 25(11): 2545-54
Author(s): Holvik K, Gjesdal CG, Tell GS, Grimes G, Schei B, Apalset EM, Samuelsen SO.
Abstract: We investigated the risk of hip fracture according to circulating alpha-tocopherol, a plant-derived substance with antioxidant properties, in community-dwelling older Norwegians. We found a linear increasing risk of hip fracture with lower serum alpha-tocopherol concentrations, with a 51% higher risk in the lowest compared to the highest quartile. INTRODUCTION: Oxidative stress is a suggested contributing cause of osteoporosis and fractures. Vitamin E (alpha-tocopherol) has potent antioxidant properties in humans. The relationship between circulating alpha-tocopherol and
fracture risk is not established. The aim of this study was to investigate the association between serum alpha-tocopherol concentrations and risk of hip fracture during up to 11 years of follow-up.

Title: The risk of major and any (non-hip) fragility fracture after hip fracture in the United Kingdom: 2000-2010.
Citation: Osteoporosis International, November 2014, 25(11): 2555-63
Author(s): Gibson-Smith D,Klop C,Elders PJ,Welsing PM,van Schoor N,Leufkens HG,Harvey NC.
Abstract: The risk of a subsequent major or any fracture after a hip fracture and secular trends herein were examined. Within 1 year, 2.7 and 8.4 % of patients sustained a major or any (non-hip) fracture, which increased to 14.7 and 32.5 % after 5 years. Subsequent fracture rates increased during the study period both for major and any (non-hip) fracture. INTRODUCTION: Hip fractures are associated with subsequent fractures, particularly in the year following initial fracture. Age-adjusted hip fracture rates have stabilised in many developed countries, but secular trends in subsequent fracture remain poorly documented. We thus evaluated secular trends (2000-2010) and determinants for the risk of a subsequent major (humerus, vertebral, or forearm) and any (non-hip) fracture after hip fracture.

Citation: Osteoporosis International, November 2014, 25(11): 2565-71
Author(s): Nakamura K,Kitamura K,Inoue M,Sawada N,Tsugane S.
Abstract: This study assessed the effects of physical activity on a 10-year incidence of self-reported vertebral fractures in adult women of a large Japanese cohort. Medium levels of strenuous activity and long-duration sedentary activity were associated with a lower incidence of vertebral fractures; association patterns appear to be different from hip fractures.INTRODUCTION: Physical activity helps prevent hip fracture, but little is known about the longitudinal association between physical activity and vertebral fractures. The purpose of this study was to evaluate the effects of physical activity on the 10-year incidence of symptomatic vertebral fractures using data from the Japan Public Health Center-based Prospective Study.

Title: Bone status and fractures in 85 adults with Wilson’s disease.
Citation: Osteoporosis International, November 2014, 25(11): 2573-80
Author(s): Quemeneur AS,Trocello JM,Ea HK,Ostertag A,Leufkens HG,Harvey NC.
Abstract: Wilson’s disease is characterized by copper deposition, especially in the liver and central nervous system. We assessed the prevalent fractures and bone mineral density (BMD) and related risk factors in 85 patients. BMD was normal, but patients with severe neurological involvement, low BMI, and/or amenorrhea are at risk for fractures.INTRODUCTION: Wilson’s disease (WD) is characterized by copper deposition, especially in the liver and central nervous system. Two studies showed a high prevalence of osteoporosis in WD patients. We wanted to assess the prevalent fractures and bone mineral density (BMD) and to identify risk factors for bone loss and fractures in a large group of WD patients.

Title: Patient perceptions of provider barriers to post-fracture secondary prevention.
Citation: Osteoporosis International, November 2014, 25(11): 2581-9
Author(s): Sale JE,Bogoch E,Hawker G,Gignac M,Beaton D,Jaglal S,Frankel L.
Abstract: We examined patients’ experiences regarding bone mineral density (BMD) testing and bone health treatment after being screened through Ontario’s Fracture Clinic Screening Program. Provider-level barriers to testing and treatment appeared to be as significant as patient-level barriers
and potentially had more of an impact on treatment than on testing. INTRODUCTION: Post-fracture secondary prevention programs have had modest effects on bone densitometry rates and osteoporosis (OP) treatment initiation. Few studies have examined in depth the reasons that patients choose to seek or avoid investigation and treatment after screening through such a program. Our purpose was to examine patients’ experiences regarding bone mineral density (BMD) testing and bone health treatment after screening through Ontario’s Fracture Clinic Screening Program (FCSP).

**Title:** Impact of multidisciplinary hip fracture program on timing of surgery in elderly patients.

**Citation:** Osteoporosis International, November 2014, 25(11): 2591-7

**Author(s):** Ventura C, Trombetti S, Pioli G, Belotti LM, De Palma R

**Abstract:** The effect of patient characteristics and organizational and system factors on time to surgery were studied using Emilia Romagna Region database and hospital survey. The results showed that the implementation of a Hip Fracture Program significantly increased the probability of early surgery while single intervention had only slight effect. INTRODUCTION: The purpose of this study is to evaluate the effect of formal Hip Fracture Program (HFP) on timing of surgery in hip fracture older patients.

**Title:** Adiponectin is associated with bone strength and fracture history in paralyzed men with spinal cord injury.

**Citation:** Osteoporosis International, November 2014, 25(11): 2599-607

**Author(s):** Tan CO, Battaglino RA, Doherty AL, Gupta R, Lazzari AA, Garshick E, Zafonte R, Morse LR

**Abstract:** We explored the association between adiponectin levels and bone strength in paralyzed men with spinal cord injury. We found that bone strength was inversely associated with circulating adiponectin levels. Thus, strength estimates and adiponectin levels may improve fracture risk prediction and detection of response to osteogenic therapies following spinal cord injury. PURPOSE: Previous research has demonstrated an inverse relationship between circulating adiponectin and bone mineral density, suggesting that adiponectin may be used as a biomarker for bone health. However, this relationship may reflect indirect effects on bone metabolism via adipose-mediated mechanical pathways rather than the direct effects of adipokines on bone metabolism. Thus, we explored the association between circulating adiponectin levels and bone strength in 27 men with spinal cord injury.

**Title:** Reconsideration of the relevance of mild wedge or short vertebral height deformities across a broad age distribution.

**Citation:** Osteoporosis International, November 2014, 25(11): 2609-15

**Author(s):** Yu W, Lin Q, Zhou X, Shao H, Sun P

**Abstract:** Based on an evaluation of vertebral fracture prevalence on lateral radiographs across all age groups in a large cohort, mild or wedge-shaped vertebral body changes identified among adults should be managed as osteoporosis or at least considered as a risk factor for osteoporotic fracture, since they are rare among young subjects. INTRODUCTION: Radiographic assessment of vertebral fractures is limited by the inability to distinguish mild fractures from congenital mild wedge deformities or vertebral height deformities of short vertebral height. We attempted to quantify the expected background prevalence of these deformities by measuring vertebral fracture prevalence across all age groups in a large hospital-based retrospective Chinese cohort.

**Title:** Reference equations for ultrasound bone densitometry of the radius in Central European children and adolescents.
**Citation:** Osteoporosis International, November 2014, 25(11): 2617-23

**Author(s):** Scherrer MJ, Rochat MK, Inci D, Moeller A

**Abstract:** Bone density measurements are important for evaluation and follow-up of children with alterations in their mineral status (increased risk for fractures and osteoporosis subsequently). Interpretation of these measurements relies on the availability of appropriate reference equations. We developed gender-specific, age-dependent reference values of bone density for Central European children.

**INTRODUCTION:** In recent years, there has been an increasing demand for the measurement of bone density in children exposed to an increased risk of early alterations in their bone status. These values must be compared to an adequate reference population. The aim of the present study was to create reference equations of radial speed of sound (SOS) for Central European children and adolescents.

**Title:** Computed digital absorptiometry for measurement of phalangeal bone mineral mass on a slot-scanning digital radiography system.

**Citation:** Osteoporosis International, November 2014, 25(11): 2625-30

**Author(s):** Dendere R, Whiley SP, Douglas TS

**Abstract:** Computed digital absorptiometry is a low-cost and low-radiation technique for rapid measurement of phalangeal bone mineral mass. We implement and evaluate this technique on a slot-scanning radiography system. Results, based on measurements of excised phalangeal bones, indicate that the technique has potential for use in clinical assessment of osteoporosis.

**INTRODUCTION:** The current gold standard method for bone assessment in the diagnosis of osteoporosis requires specialised and expensive machines, highly trained personnel to conduct the examination and is available only at specialist centres. The technique, termed dual-energy X-ray absorptiometry (DXA), involves taking a bone mineral density measurement at the femur or lumbar spine. Measurements of bone at peripheral sites such as the phalanges using DXA and other techniques have been shown to have potential use in the diagnosis of osteoporosis. Computed digital absorptiometry (CDA) is a low-cost, low-radiation radiographic technique for assessing phalangeal bone mineral mass. It uses an aluminium step wedge as a calibration device to compute bone mineral mass in units of equivalent aluminium thickness. In this study, we assess the feasibility of using CDA on a slot-scanning radiography system for measuring phalangeal bone mineral mass.

**Title:** Predictors of low bone mineral density of the stroke-affected hip among ambulatory individuals with chronic stroke.

**Citation:** Osteoporosis International, November 2014, 25(11): 2631-8

**Author(s):** Marzolini S, McIlroy W, Tang A, Corbett D, Craven BC, Oh PI, Brooks D

**Abstract:** Risk of hip fracture is greater poststroke than in an age-matched healthy population, in part because of declining hip BMD. We found that individuals may be at risk of loss of hip BMD from muscle atrophy, asymmetrical gait, and poor affected-side ankle dorsiflexor strength. These impairments may be targeted during rehabilitation.

**INTRODUCTION:** This study aimed to determine predictors of low hip BMD on the stroke-affected side in people living in the community.

**Title:** The measurement of bone mineral density of bilateral proximal humeri using DXA in patients with unilateral rotator cuff tear.

**Citation:** Osteoporosis International, November 2014, 25(11): 2639-48

**Author(s):** Oh JH, Song BW, Kim SH, Choi JA, Lee JW, Chung SW, Rhie TY

**Abstract:** We propose that the measurement of the bone mineral density (BMD) of the proximal humerus be standardized using the dual energy X-ray absorptiometry (DXA) in patients supposed to undergo rotator cuff repair surgery as well as those with the fracture of the proximal humerus as the BMD of the proximal humerus is decreased in these patients.

**INTRODUCTION:** We propose that the
measurement of the BMD of the proximal humerus be standardized using the DXA in patients who are supposed to undergo rotator cuff repair surgery as well as those with the fracture of the proximal humerus.

**Title:** Efficacy and safety of oral recombinant calcitonin tablets in postmenopausal women with low bone mass and increased fracture risk: a randomized, placebo-controlled trial.

**Citation:** Osteoporosis International, November 2014, 25(11): 2649-56

**Author(s):** Binkley N, Bone H, Gilligan JP, Krause DS

**Abstract:** The effect of an investigational oral calcitonin tablet upon bone mineral density (BMD) of the spine was investigated in postmenopausal women with low bone mass and at increased risk of fracture. Compared to placebo, calcitonin tablets increased lumbar spine BMD. This agent may provide an additional choice for patients. **INTRODUCTION:** An investigational oral salmon calcitonin preparation was previously shown to increase lumbar spine BMD in postmenopausal women with osteoporosis. Our objective was to evaluate the use of this agent in postmenopausal women with low bone mass and at increased fracture risk but not meeting BMD criteria for osteoporosis.

**Title:** Radiation-free spinometry adds to the predictive power of historical height loss in clinical vertebral fracture assessment.

**Citation:** Osteoporosis International, November 2014, 25(11): 2657-62

**Author(s):** Krause M, Lehmann A, Vettorazzi E, Amling M, Barvencik F

**Abstract:** After introducing radiation-free spinometry as a diagnostic tool to predict prevalent vertebral fractures, its validity and comparison with established tools such as historical height loss (HHL) was missing. This study shows that radiation-free spinometry is valid and its application adds predictive power to the ability of HHL to assess presence of vertebral fractures. **INTRODUCTION:** Recently, radiation-free spinometry was introduced to identify patients with vertebral fractures (VFs). The goals of this study were to validate previous findings and to test the predictive accuracy of radiation-free spinometry compared to the assessment of historical height loss (HHL).

**Title:** The relationship between BPAQ-derived physical activity and bone density of middle-aged and older men.

**Citation:** Osteoporosis International, November 2014, 25(11): 2663-8

**Author(s):** Bolam KA, Beck BR, Adlard KN, Skinner TL, Cormie P, Galvao DA, Spry N, Newton RU, Taaffe DR

**Abstract:** The bone-specific physical activity questionnaire (BPAQ) accounts for activities that affect bone but has not been used in studies with older adults. Relationships exist between the BPAQ-derived physical activity and bone density in healthy middle-aged and older men but not men with prostate cancer. Disease-related treatments detrimental to bone should be considered when administering the BPAQ. **INTRODUCTION:** The bone-specific physical activity questionnaire (BPAQ) was developed to account for bone-specific loading. In this retrospective study, we examined the relationship between BPAQ-derived physical activity and bone mineral density (BMD) in middle-aged and older men with and without prostate cancer.

**Title:** Comment on Tadrous et al.: Comparative gastrointestinal safety of bisphosphonates in primary osteoporosis: a network meta-analysis.

**Citation:** Osteoporosis International, 11 2014, vol./is. 25/11(2669), 0937-941X; 1433-2965 (2014 Nov)

**Author(s):** Pazianas M, Abrahamsen B
Title: Comparative gastrointestinal safety of bisphosphonates in primary osteoporosis: a network meta-analysis-reply to Pazianas and Abrahamsen.
Citation: Osteoporosis International, November 2014, 25(11): 2671-2
Author(s): Tadrous M, Mamdani MM, Juurlink DN, Krahn MD, Levesque LE, Cadarette SM

New NICE Guidance

Vitamin D: increasing supplement use among at-risk groups (PH56) November 2014
The OSCAR 3 ultrasonic arthroplasty revision instrument for removing bone cement during prosthetic joint revision (MIB13) November 2014

Latest relevant Systematic Reviews from the Cochrane Library

Human parathyroid hormone for preventing and treating glucocorticoid-induced osteoporosis
Akira Onishi, Akira Sato, Masahiro Iwasaku and Toshi A Furukawa
Online Publication Date: September 2014

NHS Behind the Headlines

Milk may be linked to bone fractures and early death October 2014

New activity in Uptodate/DynaMed

Treatment of osteoporosis in men updated November 2014
Osteoporosis updated December 2014
Current Awareness Database Articles

If you require full articles, or a more enhanced search of any of the below topics please email library@uhbristol.nhs.uk

Title: Agile launches hip fracture briefing.
Citation: Frontline (20454910), 05 November 2014, 20(19):12-13
Author(s): Millett, Robert
Publication type: journal article

Title: Anesthesia technique and outcomes after hip fracture surgery
Citation: JAMA - Journal of the American Medical Association, November 2014, 312(17):1801
Author(s): Bulka C.M., Wanderer J.P., Ehrenfeld J.M.
Publication type: Journal: Letter

Title: Anesthesia technique and outcomes after hip fracture surgery--reply.
Citation: JAMA - Journal of the American Medical Association, 05 November 2014, 312(17): 1802-1802
Author(s): Neuman, Mark D, Rosenbaum, Paul R, Silber, Jeffrey H
Publication type: journal article

Title: Antipsychotics and osteoporosis: Current awareness and practice in primary care
Citation: British Journal of General Practice, November 2014, 64(628): 562-563
Author(s): Jones E.
Publication type: Journal: Letter

Title: Appendicular skeletal muscle in hospitalised hip-fracture patients: development and cross-validation of anthropometric prediction equations against dual-energy X-ray absorptiometry.
Citation: Age & Ageing, 01 November 2014, 43(6): 857-862
Author(s): Villani, Anthony Michael, Crotty, Maria, Cameron, Ian D., Kurrle, Susan E.
Abstract: Background: accurate and practical assessment methods for assessing appendicular skeletal muscle (ASM) is of clinical importance for the diagnosis of geriatric syndromes associated with skeletal muscle wasting.Objectives: the purpose of this study was to develop and cross-validate novel anthropometric prediction equations for the estimate of ASM in older adults post-surgical fixation for hip fracture, using dual-energy X-ray absorptiometry (DEXA) as the criterion measure.
Publication type: journal article

Title: Are patients' preferences transferable between countries? a cross-european discrete-choice experiment to elicit patients' preferences for osteoporosis drug treatment
Citation: Value in Health, November 2014, 17(7): A385
Author(s): Hiligsmann M., Dellaert B., Dirksen C., Van der Weijden T., Watson V., Goemaere S., Reginster J.Y. Abstract: Objectives: Discrete-choice experiments are increasingly used to assess preferences in health care. To date, very little is known about the transferability of patients' preferences between jurisdictions. In this study, we aim to evaluate the preferences of patients with, or at risk of, osteoporosis for medication attributes in six European countries, and to assess whether preferences are transferable across these countries.
Publication type: Journal: Conference Abstract

Title: Association of atypical femoral fractures with bisphosphonate use by patients with varus hip geometry.
Citation: Journal of Bone & Joint Surgery, American Volume, 19 November 2014, 96(22): 1905-1909
Author(s): Hagen, Jennifer E, Miller, Anna N, Ott, Susan M, Gardner, Michael, Morshed, Saam, Jeray, Kyle.
Abstract: BACKGROUND: There is increasing evidence associating "atypical" femoral fractures with prolonged exposure to bisphosphonate therapy. The cause of these fractures is unknown and likely multifactorial. This study evaluated the hypothesis that patients with primary osteoporosis who sustain atypical femoral fracture(s) while on chronic bisphosphonate therapy have a more varus proximal femoral geometry than patients who use bisphosphonates for primary osteoporosis but do not sustain a femoral fracture.
Publication type: journal article

Title: Baseline patient characteristics of a prospective observational study to evaluate the care map of women with postmenopausal osteoporosis (PMO) in Switzerland (CAMPOS)
Cartilage restoration of the hip using fresh osteochondral allograft: Resurfacing the Potholes.

**Citation:** Bone & Joint Journal, 02 November 2014, 96-B(11): 11-16

**Author(s):** Khanna, V, Tushinski, D M, Drexler, M, Backstein, D B, Gross, A E, Safir, O A, Kuzyk, P R

**Abstract:** Cartilage defects of the hip cause significant pain and may lead to arthritic changes that necessitate hip replacement. We propose the use of fresh osteochondral allografts as an option for the treatment of such defects in young patients. Here we present the results of fresh osteochondral allografts for cartilage defects in 17 patients in a prospective study. The underlying diagnoses for the cartilage defects were osteochondritis dissecans in eight and avascular necrosis in six. Two had Legg-Calve-Perthes and one a femoral head fracture. Pre-operatively, an MRI was used to determine the size of the cartilage defect and the femoral head diameter. All patients underwent surgical hip dislocation with a trochanteric slide osteotomy for placement of the allograft. The mean age at surgery was 25.9 years (17 to 44) and mean follow-up was 41.6 months (3 to 74). The mean Harris hip score was significantly better after surgery ($p < 0.01$) and 13 patients had fair to good outcomes. One patient required a repeat allograft, one patient underwent hip replacement and two patients are awaiting hip replacement. Fresh osteochondral allograft is a reasonable treatment option for hip cartilage defects in young patients. Cite this article: Bone Joint J 2014;96-B(11 Supple A):11-16.

**Publication type:** Journal article
Title: Comparative effectiveness of pharmacologic treatments to prevent fractures: an updated systematic review.
Citation: Annals of Internal Medicine, 18 November 2014, 161(10): 711-723
Author(s): Crandall, Carolyn J, Newberry, Sydne J, Diamant, Allison, Lim, Yee-Wei, Gellad, Walid F.
Abstract: BACKGROUND: Osteoporosis is a major contributor to the propensity to fracture among older adults, and various pharmaceuticals are available to treat it. PURPOSE: To update a review about the benefits and harms of pharmacologic treatments used to prevent fractures in adults at risk.
Publication type: journal article

Title: CORR Insights(R): Surgery for Hip Fracture Yields Societal Benefits That Exceed the Direct Medical Costs.
Citation: Clinical Orthopaedics & Related Research, 01 November 2014, 472(11): 3547-3548
Author(s): Kates, Stephen L
Publication type: journal article

Title: Cost-effectiveness analysis of strontium ranelate versus alendronate for management of osteoporosis among post-menopausal women in Malaysia using a markov modelling approach
Citation: Value in Health, November 2014, 17(7): A382
Author(s): Wu D.B.C., Hussain S., Mak V., Lee K.K.C.
Abstract: Objectives: Osteoporotic fractures are common in older adults and are often associated with high morbidity and mortality. As the incidence increases with age, it is natural that osteoporotic fractures have become a major health problem worldwide. Increasing number of patients with osteoporotic fracture will have a serious economic impact on the patient themselves and the society. The objective of this study is to study the cost-effectiveness of strontium ranelate compared to alendronate for patients with post-menopausal osteoporotic fractures in Malaysia.
Publication type: Journal: Conference Abstract

Title: Cost-effectiveness analyses of screening and treatment strategies for postmenopausal osteoporosis in Chinese women
Citation: Value in Health, November 2014, 17(7): A773
Abstract: Objectives: The aim of the study was to determine the cost effectiveness of osteoporosis screening strategies in Chinese postmenopausal women. Methods: A Markov model including first and second order Monte Carlo simulation was constructed using a lifetime horizon, from which cost effectiveness of osteoporosis screening strategies from age 65 were compared to that of no screening from the Chinese health care perspective. Publication type: Journal: Conference Abstract

Title: Cost-effectiveness of multiple anti-osteoporotic therapies for secondary fracture prevention in Japan
Citation: Value in Health, November 2014, 17(7): A381
Author(s): Moriwaki K., Yoshimura M., Izumi R., Noto S.
Abstract: Objectives: The purpose of this study was to estimate the cost-effectiveness of multiple anti-osteoporotic drug therapies for secondary prevention of fractures in elderly women with osteoporosis in Japan. Methods: A state transition model with nine health states (seven types of post-fracture, bedridden, and death) was developed to predict lifetime costs and quality-adjusted life years (QALY) of no antiosteoerotic therapy and eight drug therapies in patients with a previous vertebral fracture.
Publication type: Journal: Conference Abstract

Title: Determinants of non-persistence to antiosteoporotic drugs by using administrative database
Citation: Value in Health, November 2014, 17(7): A384
Author(s): Orlando V., Guerriero F., Monetti V.M., Putignano D., Moretti A., Iolascon G., Menditto E.
Abstract: Objectives: Osteoporosis treatment involves several therapeutic tools, including long-term drug therapy. Subjects with chronic disorders are more likely to be non-adherent and/or non-persistent to treatment than those with other diseases. Adherence is the extent to which patients take medication as prescribed by their physicians, whereas persistence is the time from treatment initiation to discontinuation. Lack of persistence is common among subjects using oral anti-osteoporotic drugs, and leads to increased risk of fragility fracture. The aim of our study is to analyze the rates and reasons for discontinuation of anti-osteoporotic drugs in the Campania Region.
Publication type: Journal: Conference Abstract
**Title:** Difficulties in life after hip fracture and expected hospital supports for patients and their families.

**Citation:** International Journal of Orthopaedic & Trauma Nursing, 01 November 2014, 18(4): 191-204

**Author(s):** Kondo, Akiko, Sada, Keiko, Ito, Yayoi, Yamaguchi, Chikae, Horii, Naoko, Adachi, Harue.

**Abstract:** Summary Aim To describe difficulties experienced by patients with hip fracture after subacute care, and support wanted from the hospital following surgery. Methods This was a survey study of two community general hospitals in Japan. A questionnaire was sent to patients and/or their family members. Data were collected from 2010 to 2012.

**Publication type:** journal article

---

**Title:** Duration of breastfeeding as a risk factor for vertebral fractures

**Citation:** Bone, November 2014, vol./is. 68: 41-45

**Author(s):** Bolzetta F., Veronese N., De Rui M., Berton L., Carraro S., Pizzato S., Girotti G., De Ronch I.

**Abstract:** Purpose: Among the risk factors for osteoporosis and fractures, gynecological history (fertile period, parity and breastfeeding) play an important part. Changes in calcium metabolism to enable an adequate mineral transfer to the milk have a prominent role in bone loss during breastfeeding. Data on the influence of breastfeeding in postmenopausal osteoporosis are inconsistent. The aim of the present study was to identify any association between duration of breastfeeding and vertebral fractures in postmenopausal women.

**Publication type:** journal article

---

**Title:** The effects of gallium chloride on apoptosis osteoporosis model of rats caused by tretinoic acid

**Citation:** Value in Health, November 2014, 17(7): A771

**Author(s):** Chen Q., Liu D., Xiong Y.M., Wang Z.L.

**Abstract:** Objectives: Cell apoptosis is one of the pathogenesis of osteoporosis. Among a lot of medicine, only gallium salts can promote bone formation. The aim of this study is to investigate the effect of gallium chloride on apoptosis in osteoporosis rats which caused by tretinoic acid. Methods: 67 Sprague-Dawley (SD) female rats, three months of age, were divided into two groups. 49 rats of model group were treated with tretinoic acid for 85mg/ (kg.d) by gavage while 18 rats of normal group were treated with distilled water for same amount. All rats were administrated for 15 days.

**Publication type:** Journal: Article

---

**Title:** Extramedullary Compared with Intramedullary Implants for Intertrochanteric Hip Fractures: Thirty-Day Outcomes of 4432 Procedures from the ACS NSQIP Database.

**Citation:** Journal of Bone & Joint Surgery, American Volume, 19 November 2014, 96(22): 1871-1877

**Author(s):** Bohl, Daniel D., Basques, Bryce A., Gollevaux, Nicholas S., Miller, Christopher P.

**Abstract:** BACKGROUND: For more than thirty-five years, the sliding hip screw, an extramedullary implant, has been the standard treatment for the stabilization of intertrochanteric fractures. Over the last decade, intramedullary implants have replaced extramedullary implants as the most commonly used type of implant in the United States for the treatment of this condition, without strong evidence of superior outcomes.

**Publication type:** journal article

---

**Title:** Femoral neck fractures: A Changing Paradigm.

**Citation:** Bone & Joint Journal, 02 November 2014, 96-B(11): 43-47

**Author(s):** Su, E P., Su, S L.

**Abstract:** Surgical interventions consisting of internal fixation (IF) or total hip replacement (THR) are required to restore patient mobility after hip fractures. Conventionally, this decision was based solely upon the degree of fracture displacement. However, in the last ten years, there has been a move to incorporate patient characteristics into the decision making process. Research demonstrating that joint replacement renders superior functional results when compared with IF, in the treatment of displaced femoral neck fractures, has swayed the pendulum in favour of THR. However, a high risk of dislocation has always been the concern. Fortunately, there
are newer technologies and alternative surgical approaches that can help reduce the risk of dislocation. The authors propose an algorithm for the treatment of femoral neck fractures: if minimally displaced, in the absence of hip joint arthritis, IF should be performed; if arthritis is present, or the fracture is displaced, then THR is preferred. Cite this article: Bone Joint J 2014;96-B(11 Suppl A):43-7.

**Publication type:** journal article

**Title:** Fuzzy set regression method to evaluate the heterogeneity of misclassifications in disease screening with interval-scaled variables: Application to osteoporosis (KCIS No. 26)

**Citation:** International Journal of Biostatistics, November 2014, 10(2): 261-276

**Author(s):** Chen L.-S., Yen M.-F., Chiu Y.-H., Chen H.-H.

**Abstract:** Although the trade-off between the two misclassifications (false-positive fraction and false-negative fraction), corresponding to type I and type II error in statistical hypothesis testing based on Neyman-Pearson lemma, to determine the optimal cutoff in the province of evaluating the accuracy of medical diagnosis and disease screening using interval-scaled biomarkers has been attempted by the receiver operating characteristic (ROC) curve, the heterogeneity of the two misclassifications in relation to the utility or individual preference for relative weights between the two errors has been barely addressed and has increasingly gained attention in disease screening when the optimal subject-specific or subgroup-specific cutoff (the heterogeneity of ROC curve) is underscored. We proposed a fuzzy set regression method to achieve such a purpose. The proposed method was illustrated with data on screening for osteoporosis with bone mineral density.

**Publication type:** Journal: Article

**Title:** Glucocorticoids in early rheumatoid arthritis: Are the benefits of joint-sparing effects offset by the adverse effect of osteoporosis? The effects on bone in the Utrecht study and the camera-II study

**Citation:** NeuroImmunoModulation, November 2014, 22: 66-71

**Author(s):** Jacobs J.W.G., Bijlsma J.W.J., Van Laar J.M.

**Abstract:** This paper reviews the clinical effects on bone of 10 mg of prednisone daily in early rheumatoid arthritis, given for 2 years in the Utrecht Study and in the second CAMERA (Computer-Assisted Management in Early Rheumatoid Arthritis) Study, and addresses the question whether there were joint-sparing effects and whether these were offset by adverse effects, especially osteoporosis. We conclude that a 2-year adjunct treatment with 10 mg of prednisone daily increases the benefits of disease-modifying antirheumatic drug therapy and has jointsparing properties, even if added to the tight control methotrexate-based strategy aiming for remission. Importantly, with good control of inflammation and adequate use of calcium, vitamin D and bisphosphonates - According to national or international guidelines - steroid-induced osteoporosis is rare over 2 years.

**Publication type:** Journal: Article

**Title:** Health economic evaluation of osteoporosis screening and treatment strategy in the elderly Japanese women

**Citation:** Value in Health, November 2014, 17(7): A380

**Author(s):** Yoshimura M., Moriwaki K., Noto S., Takiguchi T.

**Abstract:** Objectives: The objective of this study was to estimate the cost-effectiveness of osteoporosis screening and treatment with alendronate in the Japanese women aged >65 years without a fragility fracture history. Methods: A Markov model with ten health states (no event, seven types of post-fracture, bedridden, and death) was developed to predict lifetime costs and quality-adjusted life years (QALY) of screening and treatment strategy, comparing with no screening.

**Publication type:** Journal: Conference Abstract

**Title:** Health literacy and health care utilization among adults with osteoporosis

**Citation:** Value in Health, November 2014, 17(7): A776

**Author(s):** Rasu R., Agbor Bawa W., Rianon N.

**Abstract:** Objectives: Every year, osteoporosis accounts for two million fragility fractures leading to disability, decreased quality of life and increased health care cost. Health literacy poses a challenge in delivering effective health care services. Impact of health literacy on health care utilization in the osteoporotic patients is unknown. We describe(1) health care utilization for osteoporosis patients in the USA(2) their prescription drug expenses, and(3) examine any effects that health literacy may have on the above factors.

**Publication type:** Journal: Conference Abstract

**Title:** Increased bone mineral density (BMD) in postmenopausal women with osteoporosis (OP) receiving two denosumab injections in routine clinical practice in bulgaria
Citation: Value in Health, November 2014, 17(7): A389
Author(s): Boyanov M., Shinkov A., Psachoulia E., Intorcia M., Petkova R.
Abstract: Objectives: To describe baseline characteristics and changes in BMD T-scores at 1 year, in postmenopausal women with OP receiving 2 denosumab injections in routine clinical practice in Bulgaria.
Methods: This retrospective observational study, conducted in 11 specialist (endocrinology or rheumatology) practices scattered geographically across Bulgaria, included postmenopausal women > 50 years old with a clinical diagnosis of OP, who initiated denosumab 60 mg Q6M on or after Oct 2011 (regulatory approval of denosumab in Bulgaria) and received a follow-up injection within 7 months (until Aug 2013).
Publication type: Journal: Conference Abstract

Title: Initiation of pharmacologic treatment for osteoporosis after vertebral osteoporotic fractures: Do we really own the bone?
Citation: Spine Journal, November 2014, 14(11) SUPPL. 1: S111
Author(s): Gum J.L., Carreon L.Y., Glassman S.D.
Abstract: BACKGROUND CONTEXT: The US General Surgeon issued a report in 2004 to focus the attention of physicians to address the increasing burden of osteoporosis. In that report, pharmacological treatment after fragility fractures in the Medicare population was initiated in only 18% of patients. A position statement was issued by the American Orthopedic Association (AOA) acknowledging the “Leadership in Orthopaedics: Taking a Stand to Own the Bone.” The subsequent increased awareness of the negative impact following osteoporotic vertebral compression fractures should, in theory, lead to an increased rate of medical treatment of osteoporosis. PURPOSE: The purpose of the study is to estimate the proportion of patients who receive pharmacologic treatment for osteoporosis following an osteoporotic fracture of the spine.
Publication type: Journal: Conference Abstract

Title: Long-term outcome of bisphosphonate therapy in patients with primary hyperparathyroidism
Citation: Clinical Chemistry and Laboratory Medicine, November 2014, 52(11): eA224
Author(s): Segula D., Nikolova S., Marks E., Ranganath L.R., Mishra V.
Abstract: Aim: Primary hyperparathyroidism (PHPT) is commonly associated with reduced bone mineral density (BMD) presenting with osteoporosis, increasing the risk of bone fragility fractures in these patients. Bisphosphonates due to their anti-resorptive action are known to improve the BMD and reduce the risk of bone fragility fractures. Therefore bisphosphonates are considered as an alternative to surgical treatment in managing osteoporosis in PHPT patients. The aim of this observational study was to assess the effect of long-term bisphosphonate therapy on BMD, bone fragility fracture and biochemical markers of bone metabolism in patients with PHPT.
Publication type: Journal: Conference Abstract

Title: Low vitamin D levels were not associated with osteoporosis in chronic obstructive pulmonary disease
Citation: Respirology, November 2014, 19: 110
Author(s): Lee J.H., Lee S.J., Kong K.A., Ryu Y.J., Chang J.H.
Abstract: Background: Osteoporosis is an important comorbidity in patients with COPD. Although a low vitamin D nutritional status was closely linked to osteoporosis and asthma, its association with COPD has been controversial. We investigated whether low vitamin D levels were associated with osteoporosis in COPD patients. Methods: We analyzed data from the 2008-2010 Korean National Health and Nutrition Examination Survey (KNHANES).
Publication type: Journal: Conference Abstract

Title: ‘Making a difference’ a clinical pathway for hip fractures and the advance practice role in managing patients with minimal trauma hip fractures.
Citation: International Journal of Orthopaedic & Trauma Nursing, 01 November 2014, 18(4): 205-213
Author(s): Pickles, Sharon M., Coventry, Linda L., Glennon, Denise A., Twigg, Di E.
Abstract: Background In 2006/2007 there were estimated over 16,500 patients with hip fractures in Australia, the majority (94%) were over 65 years. Patients with hip fractures nearly always require hospitalisation and surgery. Aim The aim of this study was to assess the impact of the hip fracture clinical pathway on care of the hip fracture patient. Method This study is a retrospective medical record audit of all minimal trauma hip fracture patients over 65 years in a large tertiary hospital over a three month period before and after implementation of the hip fracture clinical pathway.
Publication type: journal article

Title: Metabolic disorders, osteoporosis and fracture risk in Asia: A systematic review
**Citation:** Value in Health, November 2014, 17(7): A772  
**Author(s):** Sugimoto T., Sato M., Dehle F.C., Brnabic A.I.M., Weston A.R., Burge R.T.  
**Abstract:** Objectives: The prevalence of both lifestyle-related metabolic disorders and osteoporosis is increasing in Asia. The aim of this systematic review was to summarise all published studies within Asia on the association between disorders of glucose and fat metabolism (type 2 diabetes, hyperglycemia, hypercholesterolemia, hyperlipidemia, dyslipidemia, metabolic syndrome (MetS) and atherosclerosis) and risk of fracture and osteoporosis. The relationship between metabolic disorders and bone mineral density (BMD) was also examined.  
**Publication type:** Journal: Conference Abstract

---

**Title:** New-onset hyponatraemia after surgery for traumatic hip fracture.  
**Citation:** Age & Ageing, 01 November 2014, 43(6): 821-826  
**Author(s):** Rudge, James Edward, Kim, Daniel  
**Abstract:** Background: hyponatraemia in orthopaedic patients is common but has been poorly investigated following surgery for traumatic hip fracture. The aims of this study were to define the incidence of new-onset post-operative hyponatraemia and to investigate associations between hyponatraemia and patient demographics, medication use and duration of hospital stay.  
**Publication type:** Journal: Article

---

**Title:** Osteoporosis  
**Citation:** Seminars in Nuclear Medicine, November 2014, 44(6): 439-450  
**Author(s):** Nanes M.S., Kallen C.B.  
**Abstract:** Osteoporotic fractures are common and result in extensive morbidity and mortality. It is possible to decrease the risk of fracture in postmenopausal, male, and glucocorticoid-induced osteoporosis with appropriate screening and treatment. The assessment of fracture risk, for which bone densitometry is only 1 component, should be the main focus of patient evaluation. Epidemiologically derived risk-assessment tools such as World Health Organization Fracture Risk Assessment Tool (FRAX) provide physicians with a way to determine the 10-year risk of osteoporotic fracture and effectively choose candidates for therapy. A number of potent skeletal antiresorptive and anabolic drugs have become available to treat osteoporosis and prevent up to 70% of fractures. Here, we provide a detailed update on clinical osteoporosis, the contribution of bone densitometry, and the approach to patients using risk assessment in the consideration of treatments. Progress in osteoporosis is an example of successful bench-to-bedside research benefitting populations worldwide.  
**Publication type:** Journal: Article

---

**Title:** Osteoporosis is adding pain to the life of patient with C.O.P.D  
**Citation:** Respirology, November 2014, 19: 121  
**Author(s):** Bhatia M., Samaria J.K., Nirla P.  
**Abstract:** COPD is no more just an airway disease, but due to the chronic inflammatory state of this disease there is an increase in the prevalence of osteoporosis in patients of COPD. We investigated the proven case of copd2 for prevalence of osteoporosis. Methods: We evaluated 65 cases with COPD (both male and female, age ranging between 45 to 65 year) with the help of dual energy radiography absorptiometry (DEXA SCAN) of A.P. spine. Then we analyzed bone mineral density, young adult T score, and age matched z-score. Results: In our study we found that 61.54% patients are having a decrease in bone mineral density. In addition, 67.80% patients have osteopenia3 and 35.40% patients have osteoporosis3. While 72.31% patients were suffering from backache. We also found out that 3 out of 65 patients have pathologic fractures. Conclusion: Osteoporosis is highly prevalent in patients with COPD and early intervention is required to prevent it and its consequences like back pain and pathological fractures.  
**Publication type:** Journal: Conference Abstract

---

**Title:** Outcomes of one year follow up post zoledronate therapy for osteoporosis: Automatic pause or continue treatment?  
**Citation:** Clinical Chemistry and Laboratory Medicine, November 2014, 52(11): eA227  
**Author(s):** Patel M.V., Senanayake R., Hope S., Jess C., Rance K., Shine B., Javaid M.K.  
**Abstract:** Introduction: Clinical trial evidence supports the use of 6 years of therapy with zoledronate but in practice many centres use three annual infusions. It is unclear whether to continue treatment one year after the infusions or automatically pause. We wished to determine the suppression of bone formation, measured by P1NP, in patients with a diagnosis of osteoporosis, one year after their final infusion in the real world setting.  
**Publication type:** Journal: Conference Abstract

---

**Title:** Periprosthetic fractures: bespoke solutions.
**Citation:** Bone & Joint Journal, 02 November 2014, 96-B(11): 48-55

**Author(s):** Yasen, A.T., Haddad, F.S.

**Abstract:** We are currently facing an epidemic of periprosthetic fractures around the hip. They may occur either during surgery or post-operatively. Although the acetabulum may be involved, the femur is most commonly affected. We are being presented with new, difficult fracture patterns around cemented and cementless implants, and we face the challenge of an elderly population who may have grossly deficient bone and may struggle to rehabilitate after such injuries. The correct surgical management of these fractures is challenging. This article will review the current choices of implants and techniques available to deal with periprosthetic fractures of the femur. Cite this article: Bone Joint J 2014;96-B(11 Suppl A):48-55.

**Publication type:** journal article

**Source:** CINAHL

---

**Title:** Protective effects of myricitrin against osteoporosis via reducing reactive oxygen species and bone-resorbing cytokines

**Citation:** Toxicology and Applied Pharmacology, November 2014, 280(3): 550-560


**Abstract:** Oxidative stress is a crucial pathogenic factor in the development of osteoporosis. Myricitrin, isolated from Myrica cerifera, is a potent antioxidant. We hypothesized that myricitrin possessed protective effects against osteoporosis by partially reducing reactive oxygen species (ROS) and bone-resorbing cytokines in osteoblastic MC3T3-E1 cells and human bone marrow stromal cells (hBMSCs). We investigated myricitrin on osteogenic differentiation under oxidative stress. Hydrogen peroxide (H₂O₂) was used to establish an oxidative cell injury model. Our results revealed that myricitrin significantly improved some osteogenic markers in these cells. Myricitrin decreased lipid production and reduced p53, p21 and p27 expression, and partially suppressed ROS production. In vivo, we established a murine ovariectomized (OVX) osteoporosis model. Our results demonstrated that myricitrin supplementation reduced serum malondialdehyde (MDA) activity and increased reduced glutathione (GSH) activity. Importantly, it ameliorated the micro-architecture of trabecular bones in the 4th lumbar vertebrae (L4) and distal femur. Taken together, these results indicated that the protective effects of myricitrin against osteoporosis are linked to a reduction in ROS and bone-resorbing cytokines, suggesting that myricitrin may be useful in bone metabolism diseases, particularly osteoporosis.

**Publication type:** Journal: Article

---

**Title:** Regional analgesia in the emergency department for hip fractures: survey of current UK practice and its impact on services in a teaching hospital.

**Citation:** Emergency Medicine Journal, 01 November 2014, 31(11): 909-913

**Author(s):** Rashid, Anwar, Beswick, Eleanor, Galitzine, Svetlana, Fitton, Laurence

**Abstract:** INTRODUCTION: While the benefits of regional analgesia (RA) for preoperative pain relief in hip fracture (HF) in elderly patients are well recognised, this service is yet to be established in many UK emergency departments (EDs). We set out to discover how widely RA is adopted in the UK EDs.

**Publication type:** journal article

---

**Title:** Risk of fracture with thiazolidinediones: An updated meta-analysis of randomized clinical trials

**Citation:** Bone, November 2014, 68: 115-123

**Author(s):** Zhu Z.-N., Jiang Y.-F., Ding T.

**Abstract:** Objective: The use of thiazolidinediones (TZDs) has been associated with increased fracture risk. We performed a comprehensive literature review and meta-analysis to estimate the risk of fractures with TZDs. Methods: We searched MEDLINE, Embase and the Cochrane Database, from inception to May 2014. We included all randomized trials that described the risk of fractures or changes in bone mineral density (BMD) with TZDs. We pooled data with odds ratios (ORs) for fractures and the weighted mean difference in BMD. To assess heterogeneity in results of individual studies, we used Cochrans's Q statistic and the I² statistic.

**Publication type:** Journal: Article

---

**Title:** Risk of osteoporotic fracture after steroid injections in medicare patients

**Citation:** Spine Journal, November 2014, 14(11) SUPPL. 1: S42-S43

**Author(s):** Carreon L.Y., Ong K.L., Lau E., Kurtz S.M., Glassman S.D.

**Abstract:** BACKGROUND CONTEXT: A recent paper showed that lumbar epidural steroid injections increased the risk of vertebral osteoporotic fractures; with each successive injection increasing the risk of fracture by a factor of 1.21, or 21%. PURPOSE: The goal of this study is to further evaluate the relationship
between steroid injections and osteoporotic fractures in a large cohort by using the Medicare database and including large joint and transforminal steroid injections, as well as osteoporotic hip and wrist fractures in the analysis. We sought to evaluate whether there would be an increased risk in all fracture locations regardless of injection location, suggesting a systemic effect or a disproportionate increased risk of osteoporotic spine fractures when steroids were injected into the spine, suggesting a local effect.

**Publication type:** Journal: Conference Abstract

**Title:** Serum levels of sclerostin and dickkopf-1: Effects of age, gender and fracture status

**Citation:** Gerontology, November 2014, 60(6): 493-501

**Author(s):** Dovjak P., Dorfer S., Fogor-Samwald U., Kudlacek S., Marculescu R., Pietschmann P.

**Abstract:** Background: Fragility fractures, especially hip fractures, are a very common complication of osteoporosis in elderly subjects. Sclerostin (SOST) and dickkopf-1 (DKK-1) are inhibitors of the canonical wnt signalling pathway and thus could be involved in the pathogenesis of age-related bone fragility. Objective: To investigate SOST and DKK-1 in a large group of geriatric patients with hip fractures and to relate the wnt inhibitors to age and gender.

**Publication type:** Journal: Article

**Title:** Shame on Us! Men Need Osteoporosis Care, Too! Commentary on an article by Carl M. Harper, MD, et al.: "Distal Radial Fractures in Older Men. A Missed Opportunity?".

**Citation:** Journal of Bone & Joint Surgery, American Volume, 05 November 2014, vol./is. 96/21(0-0), 00219355

**Author(s):** Dirschl, Douglas R

**Publication type:** journal article

**Title:** Short-term treatment experience with teriparatide in pregnancy- and lactation-associated osteoporosis

**Citation:** Journal of Obstetrics and Gynaecology, November 2014, 34(8): 736-737

**Author(s):** Coskun Benlidayi I., Sarpel T., Guzel R.

**Publication type:** Journal: Article

**Title:** Sleep disorders increase the risk of osteoporosis: A nationwide population-based cohort study

**Citation:** Sleep Medicine, November 2014, 15(11): 1339-1344

**Author(s):** Yen C.-M., Kuo C.-L., Lin M.-C., Lee C.-F., Lin K.-Y., Lin C.-L., Chang S.-N., Sung F.-C., Kao C.-H.

**Abstract:** Background: This study evaluated the relationship between sleep disorders (SDs) and osteoporosis risk in Taiwan. Methods: From the Taiwan National Health Insurance data, we identified 44,690 newly diagnosed SD patients (846 with apnea and 43,844 without) from 1998 to 2001 and 89,380 comparisons without SD in the same period frequency matched by sex, age and diagnosis year. Incident osteoporosis was measured by the end of 2010. Result: Patients with apnea-SD and nonapnea SD exhibited a higher osteoporosis incidence rate than did the comparisons (9.97 and 13.3 vs. 6.77 per 1000 person-years, respectively). Incident osteoporosis was measured by the end of 2010. Result: Patients with apnea-SD and nonapnea SD exhibited a higher osteoporosis incidence rate than did the comparisons (9.97 and 13.3 vs. 6.77 per 1000 person-years, respectively). The Cox method estimated adjusted hazard ratio (HR) of osteoporosis was 2.98 (95% confidence interval [CI] = 2.36-3.74) in apnea-SD patients, compared with 2.76 (95% CI = 2.64-2.88) in nonapnea-SD patients after controlling for sex, age, comorbidities, and treatment. Greater HRs of osteoporosis were observed for female patients (4.00, 95% CI = 3.72-4.29) and those aged >64 years (42.0, 95% CI = 33.5-52.7) in the apnea SD sub-cohort. Apnea SD was associated with the highest risk of osteoporosis without fracture compared with both the nonapnea SD sub-cohort and comparisons. Conclusion: Patients with sleep disorders have an elevated risk of osteoporosis, especially for women and the elderly.

**Publication type:** Journal: Article

**Title:** Surgery for hip fracture yields societal benefits that exceed the direct medical costs.

**Citation:** Clinical Orthopaedics & Related Research, 01 November 2014, 472(11): 3536-3546

**Author(s):** Gu, Qian, Koenig, Lane, Mather 3rd, Richard C, Tongue, John

**Publication type:** journal article

**Title:** Systematic review and meta-analysis of persistence with denosumab in patients with osteoporosis

**Citation:** Value in Health, November 2014, 17(7): A383-A384

**Author(s):** Jonsson E., Cheng L.I., Strom O., Intorcia M., Karlsson L.

**Abstract:** Objectives: Conduct a systematic review and meta-analysis of published literature on persistence with
Citation: Respirology, November 2014, 19: 102
Author(s): Sudarto, Rachman E.N., Hermansyah, Ahmad Z.
Abstract: Background: Chronic obstructive pulmonary disease (COPD) is a chronic respiratory disease characterized by systemic inflammation associated with many extrapulmonary manifestations such as osteoporosis. The proinflammatory cytokine interleukin-1beta (IL-1beta) level increase in the circulation of COPD patients. Aims: To identify the serum interleukin-1beta level in patients with COPD and its relationship with osteoporosis incidence in this group of patients.

Title: The use of clinical data repository for the establishment of an osteoporosis registry in a large health organization in Israel: Epidemiologic and pharmaepidemiologic findings
Citation: Value in Health, November 2014, 17(7): A389-A390
Author(s): Goldshein I., Shalev V., Chodick G., Chandler J., Martin Nguyen A., Ish Shalom S.
Abstract: Objectives: Osteoporosis is an important public health issue due to its rising prevalence and excess morbidity and mortality among this population. The present study aimed to demonstrate the use of clinical data repository in Israel's second largest health organization (Maccabi Healthcare Services) to establish a registry of osteoporosis patients and assess its early findings with respect to the epidemiology and burden of the disease, high risk populations, and quality of care.

Title: Trends in 25-OH vitamin D testing - Have the National Osteoporosis Society guidelines had any influence?
Citation: Clinical Chemistry and Laboratory Medicine, November 2014, 52(11): eA228
Author(s): Tidy E., shine B., Javaid K., Morovat A.
Abstract: Background: Requests for 25-OH vitamin D (25VitD) tests have been increasing nationally, but there is wide variability in 25VitD requesting in the UK. We looked at 25VitD request patterns, and assessed the impact of the National Osteoporosis Society (NOS) Guidelines on Vitamin D and Bone Health, published in April 2013. Method: OUH laboratory data were used to assess trends in 25VitD requesting between 2007 and 2013. An audit was conducted to compare the proportion of 25VitD requests meeting NOS Guidelines in June 2012 and June 2013.

Title: Uncemented Acetabular Components with Femoral Head Autograft for Acetabular Reconstruction in Developmental Dysplasia of the Hip: A Concise Follow-up Report at a Mean of Twenty Years.
Citation: Journal of Bone & Joint Surgery, American Volume, 19 November 2014, 96(22): 1878-1882
Author(s): Abdel, Matthew P, Stryker, Louis S, Trousdale, Robert T, Berry, Daniel J, Cabanela, Miguel E
Abstract: We previously reported the five to twelve-year results of total hip arthroplasty with an uncemented acetabular component and an autogenous femoral head graft in forty-four consecutive hips with developmental dysplasia. The goal of the present study was to report the implant survival rate, status of bone grafts, and clinical outcomes in thirty-five of these hips (in twenty-nine patients) followed for a mean of 21.3 years. Functional, radiographic, and survivorship results were examined. Radiographic analysis revealed an average cup inclination angle of 43° and a mean arc of cup coverage by the graft of 30°. The twenty-year survivorship free from acetabular revision was 66% (twelve acetabular revisions; eight since our previous report). Of the twelve revisions, nine were for liner wear and/or osteolysis, one was for a liner fracture, one was for aseptic loosening, and one was for instability. All bone grafts healed to the pelvis. The graft facilitated revision cup placement as no additional structural grafts or metal augments were required. We concluded that an uncemented porous-coated socket used in conjunction with a bulk femoral head autograft provides good long-term fixation and restores bone stock. LEVEL OF EVIDENCE: Therapeutic Level IV. See Instructions for Authors for a complete description of levels of evidence.

Title: United States adults meeting 2010 American college of rheumatology criteria for treatment and prevention of glucocorticoid-induced osteoporosis.
Citation: Arthritis Care & Research, 01 November 2014, 66(11): 1644-1652
Author(s): Overman, Robert A, Toliver, Joshua C, Yeh, Jun-Yen, Gourlay, Margaret L, Deal, Chad L
Publication type: journal article

Title: Use of FRAX as a Determinant for Risk-Based Osteoporosis Screening May Decrease Unnecessary Testing While Improving the Odds of Identifying Treatment Candidates
Citation: Women's Health Issues, November 2014, 24(6): 629-634
Author(s): Edwards F.D., Grover M.L., Cook C.B., Chang Y.H.H.
Abstract: Purpose: We have assessed the hypothetical impact of guideline-concordant osteoporosis screening on baseline behaviors utilizing two different guidelines and determined the relative ability of each to identify osteoporosis treatment candidates.
Publication type: Journal: Article
Library Opening Times

Staffed times 8.00 am—5.00 pm
Monday to Friday

Swipe Access 7.00 am—23.00pm
7 days a week

Level 5,
Education and Research Centre
University Hospitals Bristol

Library@UHBristol.nhs
0117 3420105