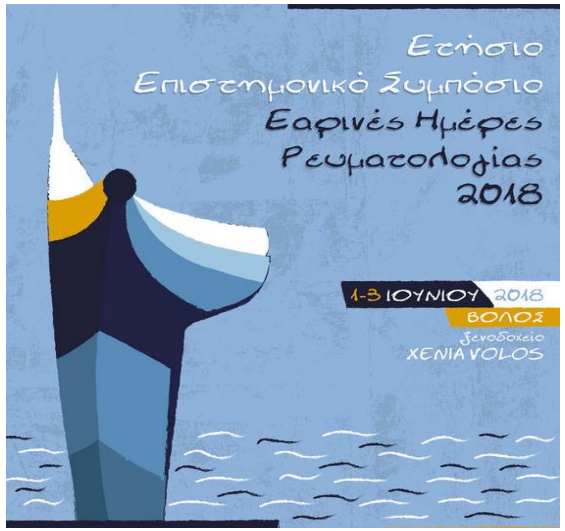
ΠΡΟΣΦΑΤΕΣ ΔΗΜΟΣΙΕΥΣΕΙΣ ΣΤΗ ΡΕΥΜΑΤΟΛΟΓΙΑ ΤΟ ΤΕΛΕΥΤΑΙΟ ΕΤΟΣ

Οστεοπόρωση, ουρική νόσος

Θεμιστοκλής Ι.Τεμεκονίδης

Ρευματολόγος -Καβάλα



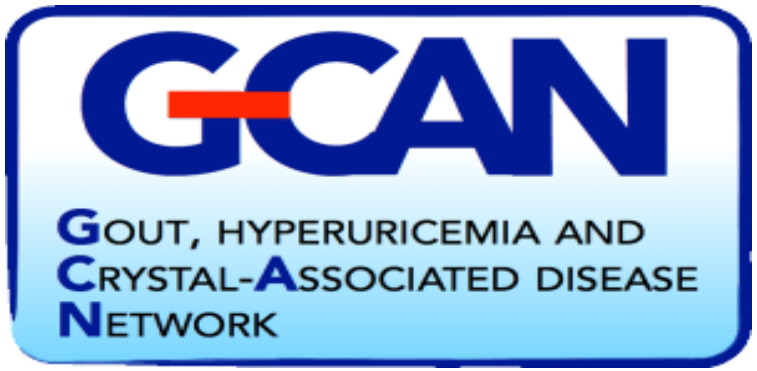
Σύγκρουση συμφερόντων

Καμμία για τη συγκεκριμένη παρουσίαση

Ουρική νόσος

Gout, Hyperuricemia and Crystal-Associated Disease Network (G-CAN) consensus statement regarding labels and definitions for disease elements in gout

- D. Bursill
- R. Terkeltaub
- K. G Saag
- H. K Choi
- N. Dalbeth



Objective

The language currently used to describe gout lacks standardisation. The aim of this project was to develop a consensus statement on the labels and definitions used to describe the basic disease elements of gout.

G-CAN endorsed labels and definitions of the basic disease elements of gout following a Delphi exercise and face-to-face consensus meeting.

- Consensus label Consensus definition
- 1. **Monosodium urate crystals** :The pathogenic crystals in gout (chemical formula: $C_5H_4N_4NaO_3$).
- 2. **Urate**: The circulating form of the final enzymatic product generated by xanthine oxidase in purine metabolism in humans (chemical formula: $C_5H_3N_4O_3^-$).
- 3. **Hyperuric(a)emia**: Elevated blood urate concentration over the saturation threshold.
- 4. **Gout flare**: A clinically evident episode of acute inflammation induced by monosodium urate crystals.
- 5**. Intercritical gout**: The asymptomatic period after or between gout flares, despite the persistence of monosodium urate crystals.
- 6. **Chronic gouty arthritis**: Persistent joint inflammation induced by monosodium urate crystals. 6a. G-CAN recommendation The label 'chronic gout' should be avoided.
- 7. **Tophus**: An ordered structure of monosodium urate crystals and the associated host tissue response.
- 8. **Subcutaneous tophus**: A tophus that is detectable by physical examination.
- 9. **Imaging evidence of monosodium urate crystal deposition** :Findings that are highly suggestive of monosodium urate crystals on an imaging test.
- 10. **Gouty bone erosion**: Evidence of a cortical break in bone suggestive of gout (overhanging edge with sclerotic margin).
- 11**. Podagra**: A gout flare at the 1st metatarsophalangeal joint.

Treatment of gout: where are we now?

Pascal Richette Rheumatology 2018

- Υψηλός επιπολασμός (2-4%), αλλά « παραμελλημένη» νόσος από τους γιατρούς (ρευματολόγους)
- Η ουρική νόσος ήταν λιγότερο ελκυστική από τα άλλα φλεγμονώδη νοσήματα (νόσος βασιλιάδων, παλιά φάρμακα σαν θεραπεία)

- Κατανόηση της παθοφυσιολογίας (γεννετικής)
- Καλύτερη απεικόνιση(Dual energy CT,US)
- Νέες θεραπείες
- EULAR, ACR, BSR έχουν βγάλει οδηγίες για την αντιμετώπιση της νόσου
- Ανάγκη για treat to target θεραπεία

ΟΔΗΓΙΕΣ(guidelines)

- Όλοι οι ασθενείς με διάγνωση ουρικής νόσου πρέπει να παίρνουν θεραπεία μείωσης του ουρικού οξέος (EULAR, ACR, BSR)
- Xanthine oxidose inhibitors (xOIs) (alopurinol, febuxostat)

- Φτωχή θεραπευτική αντιμετώπιση
- Θνησιμότητα χωρίς βελτίωση τα τελευταία 15 χρόνια (PA!)
- Φτωχά θεραπευτικά αποτελέσματα ενώ είναι πολύ εύκολο να αντιμετωπισθεί, μειώνοντας το ουρικό οξύ κάτω από 6mg/dl

ΚΟΛΧΙΚΙΝΗ

- Κακή χρήση (ρουτίνα)
- Δεν πρέπει να χρησιμοποιείται σε υψηλές δόσεις στις εξάρσεις της νόσου (ίδια αποτελεσματικότητα)
- Βελτίωση στη στεφανιαία νόσο (μείωση της συχνότητας των καρδιαγγειακών επεισοδίων σε ασθενείς με ουρική νόσο)

Αλοπουρινόλη

- 1ης γραμμής (έως 800-900mg/dl) έως ότου να επιτευχθεί ο στόχος (<6mg/dl ή 5mg/dl)
- Μπορεί να βελτιώσει την ικανότητα άσκησης στους ασθενείς με στηθάγχη και να μειώσει την αρτηριακή πίεση.

Αλοπουρινόλη

- Κίνδυνος για alopurinol hyper sensitivity syndrome στους θετικούς σε HLA-B* 58:01 (screening και έναρξη με χαμηλή δόση)

Ουρικοζουρική αγωγή

- 90% του ουρικού μονονατρίου επαναρροφάται (μείωση μεταφορέων όπως UA transporter 1, glucose transporter 1 and organic anion transporter 1,3 και 4)
- Σημαντικός ο ρόλος τους και σημαντική η βοήθεια της ουρικοζυρικής αγωγής γιατι η βλάβη στη νεφρική απόκριση είναι ο κυριότερος μηχανισμός της αύξησης του ουρικού οξέος
- Lesinurad(Zurampic), σε συνδυασμό με XIOs
- Ανάγκη για νέα ουρικοζουρικά φάρμακα

- Σε ασθενείς με αντενδείξεις ή που δεν ανέχονται τα ΜΣΑΦ, τα CSs ή την κολχικίνη, μπορούμε να δώσουμε ανταγωνιστές της IL-1 , με άριστη θεραπευτική απάντηση

Cardiovascular Safety of Febuxostat or Allopurinol in Patients with Gout

W.White K.Saag

NEJM, 12 March 2018

- Καρδιαγγειακός κίνδυνος αυξημένος σε ασθενείς με ουρική αρθρίτιδα
- Σύγκριση των αποτελεσμάτων της θεραπείας με febuxostat ή αλλοπουρινόλη σε ασθενείς με ουρική αρθρίτιδα και καρδιαγγειακή νόσο(καρδιαγγειακός θάνατος,μη θανατηφόρο έμφραγμα μυοκαρδίου,μη θανατηφόρο ΑΕΕ,ασταθή στηθάγχη).

- Η καρδιακή θνησιμότητα ήταν υψηλότερη στην ομάδα του Febuxostat όπως και όλες οι αιτίες θανάτου!

- Serum uric acid levels in patients with amyothrophic lateral sclerosis: (meta-analysis)

F Zhang. Scientific Reports 8: 1100 (2018)

- 11 studies,
- 4358 patients, 1391 healthy people
- ALS patients had significantly lower levels of UA than healthy people

- The higher the UA levels in the blood, the lower the risk of death in all causes in people with ALS
- Uric acid plays a protective role in ALS
- Well- designed randomized controlled trials are required to assess the therapeutic effects of UA on ALS
- ALS patients ked significantly lower levels of UA than healthy people

Monosodium urate crystal deposits are common in asymptomatic sons of people with gout- The sons of gout study

M. Doherty Arthritis Rheumatol 2018 May 27

Conclusion

Asymptomatic sons of people with gout frequently have hyperuricemia and MSU crystal deposits. In this study MSU crystal deposits were present in participants with SU >5 mg/dl. Evaluation of people without a family history of gout is needed to confirm if the threshold for MSU crystal deposition is also lower in the general population.

Statin case and mortality in gout: A general population based cohort study

Choi HK Semin Arthritis Rheuma 2018 Mar 17

Statin initiation is associated with a lower risk of mortality in gout, potentially with grater benefit among those without prior circulatory disease

- ΟΣΤΕΟΠΟΡΩΣΗ

Denosumab versus risedronate in GIOP: a multicenter, randomized, double-blind, active- controlled, non inferiority study

K. Saag Lancet Volume 6, No 6, p 445-454 June 2018

- 79 κέντρα στην Ευρώπη, Λατινική Αμερική, Ασία, Β. Αφρική
- >18 ετών
- Γλυκοκορτικοειδή >7,5 mg/d για τουλάχιστον 3 μήνες πρίν. (συνέχεια θεραπείας) ή λιγότερο από 3 μήνες (έναρξη θεραπείας)
- 795 ασθενείς 505 συνέχεια αγωγής

  290 έναρξη αγωγής
- Από 28/3/2012-30/6/2015

Συμπεράσματα

- Το Denosumab μπορεί να είναι μία χρήσιμη επιλογή αγωγής σε ασθενείς που θα αρχίσουν ή θα συνεχίσουν την αγωγή με κορτικοστεροειδή και βρίσκονται σε κίνδυνο κατάγματος.

On 26 April 2018, the Committee for Medicinal Products for Human Use (CHMP) adopted a positive opinion recommending a change to the terms of the marketing authorisation for the medicinal product Prolia. The marketing authorisation holder for this medicinal product is Amgen Europe B.V.

The CHMP adopted a new indication as follows:

"Treatment of bone loss associated with long-term systemic glucocorticoid therapy in adult patients at increased risk of fracture (see section 5.1)."

For information, the full indications for Prolia will be as follows[1]:

"Treatment of osteoporosis in postmenopausal women and in men at increased risk of fractures. In postmenopausal women Prolia significantly reduces the risk of vertebral, non-vertebral and hip fractures.

Treatment of bone loss associated with hormone ablation in men with prostate cancer at increased risk of fractures (see section 5.1). In men with prostate cancer receiving hormone ablation, Prolia significantly reduces the risk of vertebral fractures.

Treatment of bone loss associated with long-term systemic glucocorticoid therapy in adult patients at increased risk of fracture (see section 5.1)."

Detailed recommendations for the use of this product will be described in the updated summary of product characteristics (SmPC), which will be published in the revised European public assessment report (EPAR), and will be available in all official European Union languages after a decision on this change to the marketing authorisation has been granted by the European Commission.

- Prolia Approved by FDA for Treatment of Glucocorticoid-Induced Osteoporosis
- MAY 21, 2018
- Jennifer Barrett, Associate Editor

Review Article

Intestinal microbiota: a potential target for the treatment of postmenopausal osteoporosis

Xin Xu,Xuedong Zhou

Bone Research **volume5**, Article number: 17046 (2018)

- Eur J Endocrinol. 2018 Apr;178(4)
- Calcium supplementation in osteoporosis: useful or harmful?
- Chiodini I[1,2], Bolland MJ[3].

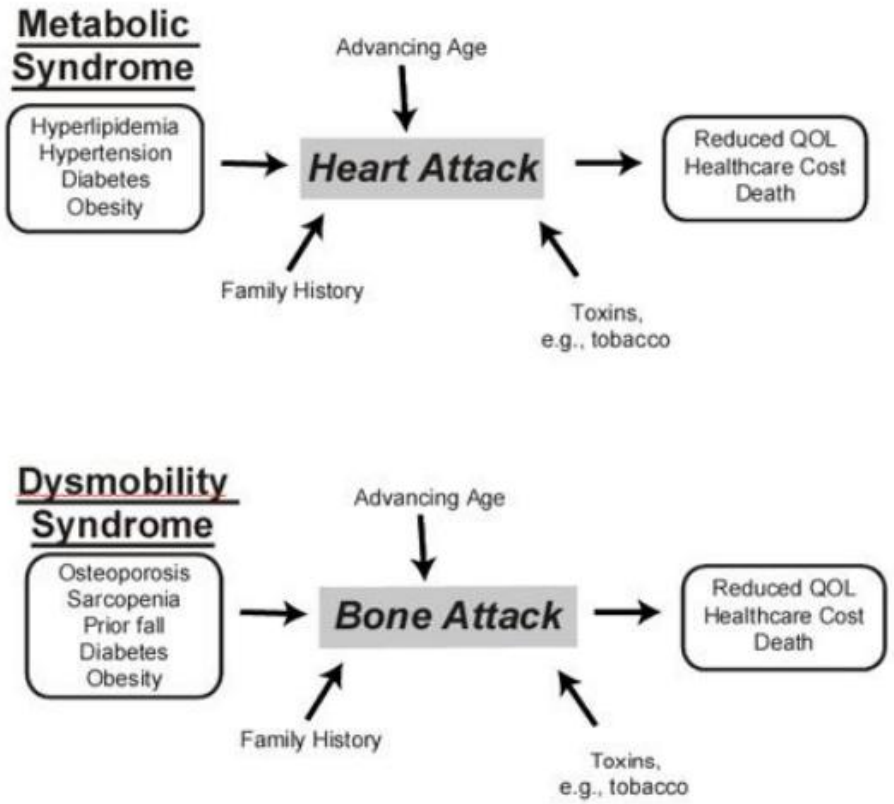
Conclusions

- In our opinion, the present evidence suggests that calcium with concomitant vitamin D supplementation, but not calcium alone, leads to an increase in BMD and to a reduction of the risk of total by 15% and of hip fractures by30%. The entity of the hip fracture risk reduction obtained using calcium plus vitamin D supplements appears to be similar to that of the myocardial infarction risk obtained using statins, drugs that are widely considered to be effective
- Calcium supplements should not be suggested in patients with a normal calcium intake.
- The reported cardiovascular risk due to calcium supplementation is yet to be demonstrated and that studies that have evaluated the influence of dietary calcium intake did not show increase in the cardiovascular risk

- J Bone Miner Res. 2017 Jul;32(7):1391-1394.
- Osteoporosis in Crisis: It's Time to Focus on Fracture.
- Binkley N[1], Blank RD[2,3], Leslie WD[4], Lewiecki EM[5], Eisman JA[6], Bilezikian JP[7].

- A crisis in osteoporosis treatment exists;
- The majority of those who sustain fracture do not receive treatment to reduce future fracture risk.

Analogous situation of Heart Attack with Bone Attack-Bone Failure



Ευχαριστώ πολύ!

Analogous situation

- Analogous Situation of Heart Attack with Bone Attack/Bone Failure.

- Analogous Situation of Heart Attack with Bone Attack/Bone Failure.


Metabolic Syndrome
Hyperlipidemia
Hypertension
Diabetes
Obesity
Advancing Age
Heart Attack
Family History
Toxins,
e.g., tobacco
Reduced QOL
Healthcare Cost
Death


Dysmobility Syndrome
Osteoporosis
Sarcopenia
Prior fall
Diabetes
Obesity
Advancing Age
Bone Attack
Family History
Toxins,
e.g., tobacco
Reduced QOL
Healthcare Cost
Death

- Analogous Situation of Heart Attack with Bone Attack/Bone Failure.

- Analogous Situation of Heart Attack with Bone Attack/Bone Failure.

Arthritis Care & Research

25 May 2018

Findings

Between March 28, 2012, and June 30, 2015, 795 patients, 505 of whom were glucocorticoid continuing and 290 of whom were glucocorticoid initiating, were enrolled and randomly assigned (398 to denosumab, 397 to risedronate). Denosumab was both non-inferior and superior to risedronate at 12 months for effect on bone mineral density at the lumbar spine in both glucocorticoid-continuing (4·4% [95% CI 3·8–5·0] vs 2·3% [1·7–2·9]; p<0·0001) and glucocorticoid-initiating (3·8% [3·1–4·5] vs 0·8% [0·2–1·5]; p<0·0001) subpopulations. Incidence of adverse events, serious adverse events (including infections), and fractures was similar between treatment groups. The most common adverse events were back pain (17 [4%] patients in the risedronate group and 18 [5%] in the denosumab group) and arthralgia (21 [5%] patients in the risedronate group and 17 [4%] in the denosumab group). Serious infection occurred in 15 (4%) patients in the risedronate group and 17 (4%) patients in the denosumab group.

Interpretation

Denosumab could be a useful treatment option for patients newly initiating or continuing glucocorticoids who are at risk of fractures.

Cardiovascular Safety of Febuxostat or Allopurinol in Patients with Gout

William B. White, M.D., Kenneth G. Saag, M.D., Michael A. Becker, M.D., Jeffrey S. Borer, M.D., Philip B. Gorelick, M.D., Andrew Whelton, M.D., Barbara Hunt, M.S., Majin Castillo, M.D., and Lhanoo Gunawardhana, M.D., Ph.D., for the CARES Investigator

N Engl J Med 2018;378:1200-10. DOI: 10.1056/NEJMoa1710895

March 12, 2018

BACKGROUND

Cardiovascular risk is increased in patients with gout. We compared cardiovascular outcomes associated with febuxostat, a nonpurine xanthine oxidase inhibitor, with those associated with allopurinol, a purine base analogue xanthine oxidase inhibitor, in patients with gout and cardiovascular disease.

METHODS

We conducted a multicenter, double-blind, noninferiority trial involving patients with gout and cardiovascular disease; patients were randomly assigned to receive febuxostat or allopurinol and were stratified according to kidney function. The trial had a prespecified noninferiority margin of 1.3 for the hazard ratio for the primary end point (a composite of cardiovascular death, nonfatal myocardial infarction, nonfatal stroke, or unstable angina with urgent revascularization).

RESULTS

In total, 6190 patients underwent randomization, received febuxostat or allopurinol, and were followed for a median of 32 months (maximum, 85 months). The trial regimen was discontinued in 56.6% of patients, and 45.0% discontinued follow-up. In the modified intention-to-treat analysis, a primary end-point event occurred in 335 patients (10.8%) in the febuxostat group and in 321 patients (10.4%) in the allopurinol group (hazard ratio, 1.03; upper limit of the one-sided 98.5% confidence interval [CI], 1.23; P = 0.002 for noninferiority). All-cause and cardiovascular mortality were higher in the febuxostat group than in the allopurinol group (hazard ratio for death from any cause, 1.22 [95% CI, 1.01 to 1.47]; hazard ratio for cardiovascular death, 1.34 [95% CI, 1.03 to 1.73]). The results with regard to the primary end point and all-cause and cardiovascular mortality in the analysis of events that occurred while patients were being treated were similar to the results in the modified intention-to-treat analysis.

CONCLUSIONS

In patients with gout and major cardiovascular coexisting conditions, febuxostat was noninferior to allopurinol with respect to rates of adverse cardiovascular events. Allcause mortality and cardiovascular mortality were higher with febuxostat than with allopurinol. (Funded by Takeda Development Center Americas; CARES ClinicalTrials .gov number, NCT01101035.)

Osteoporosis Drugs Show Safety in Chronic Ki dney Disease

Nancy A Melville September 09, 2017

(Updated) Osteoporosis drugs including oral bisphosphonates show ef ficacy and safety in the treatment of bone loss in patients with chronic kidney disease (CKD) in several observational stud ies. However, caution is still urged, particularly with oral bisphosphonates, say the authors of the research, presented here at the American Society of Bone and Mineral Research (ASBMR) 2017 Annual Meeting.

"Surprising" Findings

- In an effort to better understand the effects, Dr Prieto-Alhambra and his colleagues conducted several analyses looking at mortality, adverse events, and bone improvement among moderate- to severe-CKD patients treated with oral bisphosphonates.
  In the first of three abstracts presented at the meeting, they evaluated the efficacy of bisphosphonate in patients with moderate or severe CKD [estimated glomerular filtration rate [eGFR] of <45 mL/min), looking at bone-mineral density (BMD) changes in a Danish population between 1999 and 2016. The study excluded patients who had previously used oral bisphosphonates
  The review included data from a regional database of all DXA-based routine measurements in Funen, Denmark, in which the use of oral bisphosphonates in moderate to severe CKD was expectedly rare, with only 81 patients identified. However, compared with 282 bisphosphonate nonusers, also with stage 3B CKD, the bisphosphonate users showed gains of an average of 0.59% total hip BMD per year, whereas the nonusers lost an average of 1.98% annually.
  After adjustment for factors including age, sex, body mass index (BMI), baseline eGFR, fracture history, and other comorbidities, the mean difference was +1.81% and, in the propensity score–adjusted analysis, the difference was +2.44% in favor of oral bisphosphonate use.
  "The finding of an improved BMD is good news, as this suggests these drugs could be effective at improving bone strength," Dr Prieto-Alhambra said.

"Surprising" Findings

- In the second study, the authors evaluated all-cause mortality rates among a population of patients in UK primary-care records with eGFR <45 (CKD 3B), aged 40 and older.
  They found that among 18,904 oral bisphosphonate users with CKD 3B, compared with 190,850 nonusers also with CKD 3B, the bisphosphonate users had significantly lower all-cause mortality, with an adjusted HR of 0.85 (95% CI 0.82–0.88). Greater reductions in mortality linked to bisphosphonate use were seen in women (HR, 0.82) ,han men (HR, 0.96); in those with previous fracture (HR, 0.78) compared with no previous fracture (HR, 0.90); and in those with more severe CKD (stage
- Osteoporosis Drugs Show Safety in Chronic Kidney Disease
- 28/11/2017 https://www.medscape.com/viewarticle/885414_print
- https://www.medscape.com/viewarticle/885414_print 2/3
- 4 or higher; HR, 0.71) compared with stage 3B (HR, 0.88; all P < .0001).
  "[The findings] are surprising given that bisphosphonates are contraindicated in patients with severe kidney disease," Dr Prieto-Alhambra said.
  "We hypothesize that residual confounding, such as unobserved differences between users and nonusers of these drugs, might at least partially explain this finding. Indeed, sensitivity analyses completed more recently suggest this," he explained.
  "It is in any case reassuring that bisphosphonates are, despite being contraindicated in some of these patients, not associated with increased mortality in actual users of the drug."

"Surprising" Findings

- And in their third analysis, Dr Prieto-Alhambra's team evaluated the risk of acute kidney injury (AKI), gastrointestinal events, and hypocalcemia leading to hospital admission in the same UK population of patients with stage 3B or higher CKD, with an eGFR < 45 mL/min, but at age 50 or older. Among those patients, 19,315 were oral bisphosphonate users who were compared with 210,568 bisphosphonate nonusers.
  Overall, 8846 patients developed acute kidney injury, 499 had gastrointestinal events, and 682 developed hypocalcemia.
  In comparing the incidence rates of events between oral bisphosphonate users and nonusers, the hazard ratios (HR) were not significant for acute kidney injury (HR, 0.95; 95% CI, 0.8–1.07), gastrointestinal events (HR, 0.85; 95% CI, 0.48–1.52) or hypocalcemia (HR, 1.11; 95% CI, 0.77–1.62).
  "Bisphosphonate use is not associated with acute kidney injury, gastrointestinal events, or hypocalcemia among patients with moderate to severe (stage 3B+) CKD," the authors report.

FRI0553

THE EFFICACY OF 2-YEARS DENOSUMAB TREATMENT FOR GLUCOCORTICOID-INDUCED OSTEOPOROSIS (GIOP)

K. Akashi[1], K. Nishimura[2], G. Kageyama[3], S. Ichikawa[1], T. Shirai[1], Y. Yamamoto[1], Y. Ichise[1], H. Yamada[1], I. Naka[1], D. Waki[1], T. Okano[1], S. Takahashi[1], Y. Ueda[1], S. Sendo[1], A. Onishi[1], J. Saegusa[1], A. Morinobu[1].

[1]Department of Rheumatology and Clinical Immunology, Kobe University Hospital, Kobe;[2]Department of Endocrinology and Rheumatology, Kurashiki

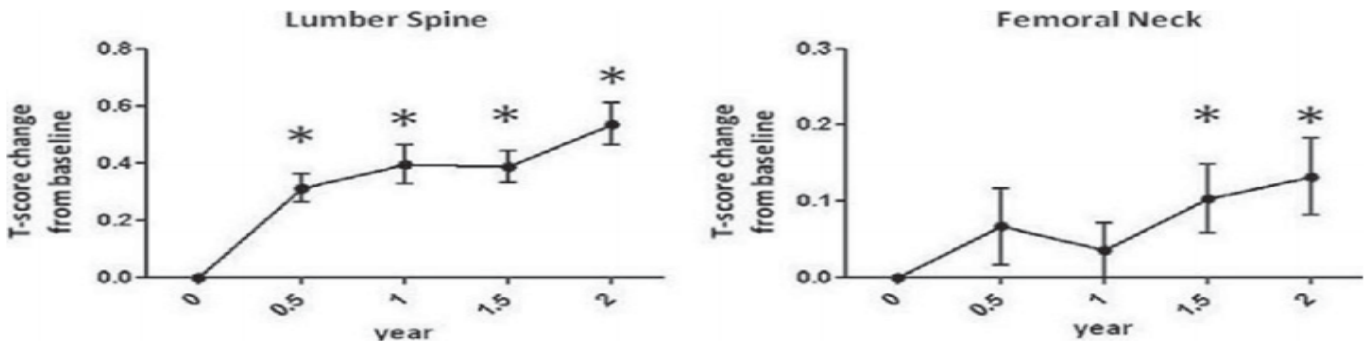
Central Hospital, Kurashiki; [3]Department of Rheumatology, Hyogo Prefectual Amagasaki General Medical Center, Amagasaki, Japan

Background: Osteoporosis is one of the important adverse effects in the glucocorticoids treatment for the patients with rheumatoid arthritis (RA) and connective tissue diseases (CTDs). Although the usefulness of denosmab for primary osteoporosis has been well-established, the efficacy for GIOP remains unclear.

Objectives: This study aimed to clarify the therapeutic effects of denosumab for GIOP.

Methods: We evaluated bone mineral density (BMD) and serum markers of bone metabolism (BAP, NTx, TRACP-5b and P1NP) of patients who had been treated with over 5mg of predonisolone for RA and CTDs, and denosumab for GIOP, for two years in Kobe University Hospital. BMD and serum markers were evaluated every six months for 2 years from the baseline. The changes of those data from baseline were analyzed by Student's t test using GraphPad Prism 5 software and $p<0.05$ was considered statistically significant.

Results: Number of the patients were 53 (male: 4 cases, female: 49 cases), and their characteristics at the beginning of denosumab treatment were as below; age: 64.19±12.0 years old, dose of prednisolon: 10.59±9.97mg/day, BMD of lumber spine: 0.768±0.112g/cm^3, T-score of lumber spine: -2.28±1.01, BMD of femoral neck: 0.540±0.085g/cm^3, T-scores of femoral neck: -2.28±0.76. After 2-years denosumab treatment, T-scores of lumber spine (0.54±0.39 gain) and femoral neck (0.13±0.26 gain) were significantly increased from baseline (Figure; mean ± SEM. *:$p<0.05$). In addition, the serum markers of bone metabolism, both absorption and formation, were significantly suppressed with denosumab.



Conclusions: Denosumab can suppress bone metabolic turnover, and increase lumber spine and femoral neck T-scores of GIOP patients.

Prolia denosumab

26 April 2018 EMA/CHMP/256922/2018 Committee for Medicinal Products for Human Use (CHMP)

On 26 April 2018, the Committee for Medicinal Products for Human Use (CHMP) adopted a **positive opinion** recommending a change to the terms of the marketing authorisation for the medicinal product Prolia. The marketing authorisation holder for this medicinal product is Amgen Europe B.V.

The CHMP adopted a new indication as follows:

"Treatment of bone loss associated with long-term systemic glucocorticoid therapy in adult patients at increased risk of fracture (see section 5.1)." For information, the full indications for Prolia will be as follows2:

"Treatment of osteoporosis in postmenopausal women and in men at increased risk of fractures. In postmenopausal women Prolia significantly reduces the risk of vertebral, non-vertebral and hip fractures.

Treatment of bone loss associated with hormone ablation in men with prostate cancer at increased risk of fractures (see section 5.1). In men with prostate cancer receiving hormone ablation, Prolia significantly reduces the risk of vertebral fractures. Treatment of bone loss associated with long-term systemic glucocorticoid therapy in adult patients at increased risk of fracture (see section 5.1)."

Detailed recommendations for the use of this product will be described in the updated summary of product characteristics (SmPC), which will be published in the revised European public assessment report (EPAR), and will be available in all official European Union languages after a decision on this change to the marketing authorisation has been granted by the European Commission.

2017 American College of Rheumatology/
American Association of Hip and Knee Surgeons
Guideline for the Perioperative Management of
Antirheumatic Medication in Patients With
Rheumatic Diseases Undergoing Elective Total Hip
or Total Knee Arthroplasty

DMARDs

DMARDs: CONTINUE these medications through surgery.	Dosing Interval	Continue/Withhold
Methotrexate	Weekly	Continue
Sulfasalazine	Once or twice daily	Continue
Hydroxychloroquine	Once or twice daily	Continue
Leflunomide (Arava)	Daily	Continue
Doxycycline	Daily	Continue

Goodman S et al. Arthritis Care & Research 2017

2017 American College of Rheumatology/ American Association of Hip and Knee Surgeons Guideline for the Perioperative Management of Antirheumatic Medication in Patients With Rheumatic Diseases Undergoing Elective Total Hip or Total Knee Arthroplasty

bDMARDs

Goodman S et al.
Arthritis Care & Research 2017

BIOLOGIC AGENTS: STOP these medications prior to surgery and schedule surgery at the end of the dosing cycle. RESUME medications at minimum 14 days after surgery in the absence of wound healing problems, surgical site infection, or systemic infection.	**Dosing Interval**	**Schedule Surgery (relative to last biologic agent dose administered) during**
Adalimumab (Humira)	Weekly or every 2 weeks	Week 2 or 3
Etanercept (Enbrel)	Weekly or twice weekly	Week 2
Golimumab (Simponi)	Every 4 weeks (SQ) or every 8 weeks (IV)	Week 5 Week 9
Infliximab (Remicade)	Every 4, 6, or 8 weeks	Week 5, 7, or 9
Abatacept (Orencia)	Monthly (IV) or weekly (SQ)	Week 5 Week 2
Certolizumab (Cimzia)	Every 2 or 4 weeks	Week 3 or 5
Rituximab (Rituxan)	2 doses 2 weeks apart every 4-6 months	Month 7
Tocilizumab (Actemra)	Every week (SQ) or every 4 weeks (IV)	Week 2 Week 5
Anakinra (Kineret)	Daily	Day 2
Secukinumab (Cosentyx)	Every 4 weeks	Week 5
Ustekinumab (Stelara)	Every 12 weeks	Week 13
Belimumab (Benlysta)	Every 4 weeks	Week 5
Tofacitinib (Xeljanz): STOP this medication 7 days prior to surgery.	Daily or twice daily	7 days after last dose

2017 American College of Rheumatology/ American Association of Hip and Knee Surgeons Guideline for the Perioperative Management of Antirheumatic Medication in Patients With Rheumatic Diseases Undergoing Elective Total Hip or Total Knee Arthroplasty

Other DMARDs

SEVERE SLE-SPECIFIC MEDICATIONS: CONTINUE these medications in the perioperative period.	**Dosing Interval**	**Continue/Withhold**
Mycophenolate mofetil	Twice daily	Continue
Azathioprine	Daily or twice daily	Continue
Cyclosporine	Twice daily	Continue
Tacrolimus	Twice daily (IV and PO)	Continue
NOT-SEVERE SLE: DISCONTINUE these medications 1 week prior to surgery	**Dosing Interval**	**Continue/Withhold**
Mycophenolate mofetil	Twice daily	Withhold
Azathioprine	Daily or twice daily	Withhold
Cyclosporine	Twice daily	Withhold
Tacrolimus	Twice daily (IV and PO)	Withhold

Goodman S et al. Arthritis Care & Research 2017

Μηνύματα για το σπίτι

- Συνέχιση csDMARDs (σε απουσία επιπλοκών)
- Διακοπή bDMARDs (**+1 εβδομαδα/+1 Μήνα-RTX**, απο το σύνηθες μεσοδιάστημα χορήγησης) πριν το χειρουργείο
- Επανέναρξη **≥ 2 εβδομάδες** μετά το χειρουργείο (σε απουσία επιπλοκών)

Statin use and mortality in gout: A general population-based cohort study.

Keller SF[1], Rai SK[2], Lu N[3], Oza A[2], Jorge AM[2], Zhang Y[3], Choi HK[2].

Semin Arthritis Rheum. 2018 Mar 17.

OBJECTIVES: Gout is associated with a higher risk of cardiovascular disease and premature mortality. We examined the potential survival benefit of statin use among gout patients in the general population.

METHODS: We performed an incident user cohort study with time-stratified propensity score matching using a database representative of the UK general population between January 1999 and December 2014. To account for potential confounders, we compared propensity score-matched cohorts of statin initiators and non-initiators within 1-year cohort accrual blocks. We estimated the hazard ratio (HR) for mortality using a Cox proportional hazard model and the mortality rate difference using an additive hazard model. We examined potential subgroup effects stratified by key factors, including circulatory disease history.

RESULTS: Among 17,018 statin initiators, 2025 deaths occurred during the follow-up (mean = 5.0 years) with a mortality rate of 24.0/1000 person-years (PY). The number of deaths and all-cause mortality rate among matched comparators during the follow-up (mean = 4.6 years) were 2503 and 31.7/1000 PY respectively. Compared with non-initiators, statin initiators experienced a 16% lower relative risk of all-cause mortality (HR = 0.84, 95% CI: 0.79-0.89) and 7.7 (95% CI: 6.1-9.3) fewer deaths per 1000 PY. This protective association was stronger among those without prior circulatory disease (HRs = 0.65 vs. 0.85; p for interaction = 0.02).

CONCLUSION: In this general population-based cohort study, statin initiation was associated with a lower risk of mortality in gout, potentially with greater benefits among those without prior circulatory disease. The proper use of statins may help to substantially improve the premature mortality in gout.

Monosodium urate crystal deposits are common in asymptomatic sons of people with gout - The Sons of gout study

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27 May 2018

Objective

To estimate the prevalence and distribution of asymptomatic monosodium urate (MSU) crystal deposition in sons of people with gout.

Method

People with gout were mailed an explanatory letter enclosing a postage-paid study-pack to mail to their son(s) ≥20 years old. Sons interested in participating returned a reply-slip and underwent telephone screening. Subsequently they attended a study-visit for blood and urine collection, and musculoskeletal ultrasonography performed blind to serum urate (SU). Images were assessed for double contour sign (DCS), intra-articular or intra-tendinous aggregates/tophi, effusion and power Doppler. Logistic regression was used to examine associations.

Results

131 sons (mean age 43.80 years, body mass index 27.10 kg/m^2) completed assessments. 64.1% had SU ≥6 mg/dl, and 29.8% had either DCS or intra-articular aggregates/tophi in ≥1 joint. All participants with MSU deposition had involvement of either 1stmetatarsophalangeal joint. 21.4% had intra-tendinous aggregates, and these associated with intra-articular MSU crystal deposits (aOR (95%CI) 2.96(1.17-7.49)). No participant had MSU crystal deposition at SU ≤5 mg/dl, and 24.2% participants with SU between 5-6 mg/dl had ultrasonographic MSU deposition. MSU crystal deposition associated with increasing SU (aOR (95%CI) 1.61(1.10-2.36) for each 1 mg/dl increase).

Treatment of gout: where are we now?

Pascal Richette

1 January 2018