after adjusting for age, gender, goot treatment, comorbidities, and medication use.

RESULTS: We identified 4821 AMI cases of which 1410 were women. The adjusted odds ratio (OR [95% CI]) of AMI among women with goot was 1.62 (1.21–2.16), higher than the adjusted OR for men (1.12 [0.99–1.26]; p-value for interaction <0.01). When combining both women and men in our analyses, we found an overall adjusted OR of 1.15 (1.06–1.25). CONCLUSIONS: Using population-based data, we found a 62% increased risk for AMI among elderly women with goot, and a 15% increased risk for elderly goot patients overall. The association between hypermic- it, a known precursor to goot, and cardiovascular disease provides a potential explanation for our findings. Gender differences in serum uric acid levels and metabol- ism may further explain the difference in risks between women and men. Findings provide support for the aggressive management of cardiovascular risk factors in goot patients.

COMPARISON OF 3 COMORBIDITY MEASURES AFFECTING PHYSICAL FUNCTION AND QUALITY OF LIFE FOR PATIENTS WITH ANKYLOSING Spondylitis

Good K, Wong R*
*Abbott Laboratories, Abbott Park, IL, USA, **Abbott Laboratories, Parsippany, NJ, USA

OBJECTIVES: In clinical studies, comorbidity measurement refers to assessment of total burden of illnesses across multiple health conditions unrelated to the patient’s disease under study. In non-randomized clinical studies and epidemiology studies, adjustment for comorbidity is often undertaken to ensure outcomes are not directly affected by comorbidities. This analysis compared 3 measurements of comorbidities and their effect on physical function and quality of life with data from a randomised controlled trial of adalimumab in ankylosing spondylitis (AS). METHODS: Data were derived from the Adalimumab Trial Evaluating Long-Term Efficacy and Safety in AS (ATLAS). Comorbidity indices at baseline were calculated as Chronic Disease Score (CDS), number of separate prescription medications (prescription medication count), and number of concurrent illnesses (concurrent illness count). Medications taken specifi- cally for the treatment of AS were excluded from the CDS and prescription medication count calculations. Univariate associations between each of the 3 indices and a physi- cal function index (SF-36 PCS) and AS disease-specific quality of life (ASQoL) at Week 12 were assessed. Correlations with each comorbidity measurement were assess- ained. Model selection (Akaike’s Information Criterion [AIC]) was used to identify the best comorbidity measure for predicting SF-36 PCS and ASQoL. RESULTS: A total of 315 patients were included in the analysis. Their mean age was 42.2 years, and most were male (74.9%). At the univariate level, all 3 indices were significant predictors of SF-36 PCS score (p < 0.02). However, only CDS and prescription medica- tion count were significantly associated with ASQoL at Week 12. All 3 indices were well-correlated with each other (range 0.750–0.917). The AIC model demonstrated that CDS was the best predictor of SF-36 PCS and ASQoL. Prescription count was the second-best ranked measure for both outcomes. CONCLUSIONS: The CDS is a suitable measure for comorbidity adjustment in examining physical function and quality of life for AS patients.

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DEVELOPMENT OF TESTS FOR DIAGNOSIS OF Rheumatoid ARTHRITIS

Schiff L., Foster T., Creden J., Gartemann J., Heish J., Pashos C.L.

Axia Bio-Pharma Solutions, Inc., Lexington, MA, USA, *Innate Diagnostics, Ltd, Hatfield, Switzerland

OBJECTIVES: New therapeutic options for rheumatoid arthritis (RA) have shifted the focus of treatment to early, aggressive intervention aimed at preventing further joint damage. However, early diagnosis has proved challenging, and recent efforts have been made to identify new diagnostic tests. We systematically reviewed the literature to assess the current status of tests for early diagnosis of RA. METHODS: We searched English-language MEDLINE-indexed publications in the 5 years prior to August 2008 concerning tests and biomarkers for early diagnosis of RA. We also searched non-MEDLINE-indexed sources such as organization websites, meeting abstracts, and governmental publications using the same keywords. RESULTS: We identified 94 primary studies from MEDLINE pertaining to tests or biomarkers for early diagnosis of RA. Non-MEDLINE sources yielded an additional 36 articles for a total of 130 reviewed for this study. In practice, no single test has proved sufficiently sensitive and specific for the diagnosis of RA. Tests currently in use, including the acute phase bio- markers erythrocyte sedimentation rate and C-reactive protein and the autoantibody rheumatoid factor (RF), are relatively nonspecific for RA. Recent efforts have focused on identifying new biomarkers with greater RA specificity. These biomarkers include antibodies, immune system biomarkers, and biomarkers of collagen breakdown and bone erosion. The autoanibody anti-cyclic citrullinated peptide (anti-CCP) offers high specificity, but lower sensitivity than RF. Newer-generation anti-CCP assays provide improved sensitivity over first-generation anti-CCP assays, but sensitivity still in- cludes their use as sole diagnostic tests for RA. The clinical utility of anti-CCP tests can be improved by combining with other assays such as RF, and provide particular value in predicting the development of persistent and/or erosive RA. CONCLUSIONS: Newer generations of the autoantibody anti-CCP assay offer high specificity for RA and appear promising as a diagnostic test in combination with other tests with greater sensitivity.

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RISK FACTORS FOR INCIDENT GOUT AMONG WOMEN: A PROSPECTIVE STUDY


Arthritis Research Centre of Canada, Vancouver, BC, Canada, *UBC School of Population & Public Health, Vancouver, BC, Canada

OBJECTIVES: To describe increasing incidence and substantial prevalency of gout among women, particularly among elderly, no prospective data on the risk factors for gout are available among women. We prospectively evaluated purported risk factors for the risk of incident gout among women and compared them with men. METHODS: Using data from the Framingham Heart Study, we prospectively examined over a 52- year period (1948–2001) the relation between prior serum uric acid levels and the risk of incident gout in 2,470 women and 1,951 men. We used Cox proportional hazards models to estimate the relative risk for incident gout by uric acid level after adjusting for age, body mass index, blood glucose level, blood cholesterol level, hypertension, use of diuretics, alcohol consumption, educational level and menopausal status.

RESULTS: Over a 28-year median follow-up, we documented 304 incident cases of gout, 104 among women. The incidence rates of gout increased with increasing serum uric acid levels, similar to men. For uric acid levels of <3.0, 5.0–5.9, 6.0–6.9, 7.0–7.9 and >8.0 mg/dl, the incidence rates of gout per 1000 person-years were 0.81, 1.42, 1.83, 6.75, and 13.09, respectively (p for trend <0.0001). The multivariate relative risk (95% CI) for incident gout for every 1.0 mg/dl increase in serum uric acid level was 1.57 (1.38–1.78) among women and 1.52 (1.36–1.71) among men. Other signifi- cant predictors of gout in women were age, obesity, hypertension, blood glucose level and diuretic use. CONCLUSIONS: These prospective data indicate that higher levels of serum uric acid increase the risk of gout among women in a graded manner, similar to men, and support the notion that serum uric acid is a reliable surrogate marker and precursor of incident gout among women as well. Age, obesity, blood pressure, blood glucose level and diuretic use were associated with the risk of incident gout among women.