

216 - Gout Patient Burden Associated with Flares, Tophi, and Awareness of Uric Acid Levels In US and EU

Sunday, November 6, 2011: 9:00 AM-6:00 PM
Hall F2 - Poster Hall (McCormick Place West)

Puja Khanna¹, Anne-Kathrin Tausche², Anna Forsythe³, Amir Goren⁴ and Dinesh Khanna¹, ¹University of Michigan, Ann Arbor, MI, ²Universitätsklinikum Carl Gustav Carus an der Technischen Universität Dresden, Dresden, Germany, ³Savient Pharmaceuticals, Inc., East Brunswick, NJ, ⁴KantarHealth, New York, NY

Presentation Number: 216

Background/Purpose: The prevalence of gout is increasing both in men and post-menopausal women. Although serum urate (SUA) levels have been associated with disease burden among gout patients, little research has examined the impact of tophi and the number of acute gout attacks on health-related quality of life (HRQOL), productivity, and healthcare resource utilization.

Method: Patients with self-reported gout (n = 620) in 2010 US and EU National Health and Wellness Surveys (cross-sectional databases representative of French, German, Italian, Spanish, UK, and US populations) and the Lightspeed Research Ailment panel: n = 338 (US) and 282 (EU) were contacted. Respondents were categorized into mutually-exclusive groups based on number of gout flares in the past 12 months (0, 1-2, 3, 4-5, 6+), current presence of gouty tophus/tophi (yes, no), and SUA level awareness (yes, no). Differences on HRQOL (SF-12v2), resource use (healthcare provider visits in last 6 months), and work and activity impairment were examined using Chi-square tests and ANOVAs for categorical and continuous variables, respectively.

Result: Majority of patients, 81.3% (n=504) were male, with mean age of 60.9 years; 31.1% were untreated with urate lowering therapy. Of 51.5% (n=319) who were on allopurinol therapy, only 9.1% (n=29) used allopurinol dose > 300mg, and 1.9% (n=6) used febuxostat. 75.6% (n=469) reported experiencing an acute gout flare in the past 12 months, and 12.3% (n=76) reported tophi. Among the 27.7% (n=172) of patients who were aware of their SUA levels (<6mg/dL - 10.0%, 6 - 8mg/dL - 12.1%, or >8mg/dL - 5.6%), these levels correlated with number of flares experienced in the past 12 months ($r_s = 0.361$) and number of tophi currently present ($r_s = 0.282$), all $p < 0.001$. Patients reported greater HRQOL burden with number of flares (see Table), and patients with tophi vs. without reported lower SF-12v2 mental (MCS) (44.4 vs. 48.6) and physical (PCS) component summary scores (36.9 vs. 41.1), plus lower SF-6D utilities (0.64 vs. 0.71). They experienced greater overall work productivity loss (40.2% vs. 21.2%), activity impairment (48.7% vs. 37.2%), and more provider visits (9.0 vs. 6.5), all $p < 0.05$. Patients aware of SUA levels had higher PCS (42.3 vs. 39.9), $p < 0.05$. In multivariable models, we predicted outcomes after adjusting for the tophi presence, number of flares, age, gender, time since diagnosis, and smoking, presence of flares (4+) were associated with MCS, PCS, and SF-6D decrements, plus activity impairment (all $p < 0.05$).

Table:

	Number of self-reported flares in past 12 months										p-value
	0 / Unknown (n=85)		1 to 2 (n=128)		3 (n=44)		4 to 5 (n=50)		6+ (n=31)		
	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	
HRQOL											
SF-12 MCS	49.91	9.67	49.23	10.30	47.85	10.03	44.66	13.03	44.46	13.43	<0.0001
SF-12 PCS	43.25	11.61	42.72	12.27	38.16	11.85	37.04	11.40	33.49	9.99	<0.0001
SF-6D Utility	0.73	0.12	0.72	0.14	0.67	0.15	0.64	0.17	0.61	0.13	<0.0001
Work Productivity											
% Work missed (n=234)	6.76	23.15	5.16	16.23	4.66	17.42	1.85	5.11	8.71	14.99	0.661
% Impairment at work (n=229)	14.12	18.35	21.22	26.72	21.62	27.84	19.26	26.01	33.33	30.60	0.056
% Overall work impairment (n=234)	19.80	26.90	23.23	29.80	24.29	30.42	19.93	26.70	36.58	33.32	0.197
% Activity impairment	28.68	28.42	36.77	33.39	43.41	34.42	45.58	34.39	54.21	30.29	<0.0001
Resource Use											
Number of ER visits	0.17	0.45	0.31	2.32	0.40	1.05	0.38	0.75	0.33	0.81	0.779
Number of days hospitalized	0.44	1.73	0.65	4.45	0.82	3.82	0.38	1.61	0.68	2.81	0.885
Number of traditional HCP visits	6.91	8.45	5.68	6.01	8.29	10.09	8.02	8.76	7.40	6.79	0.032

Note. Total n = 620, except where otherwise noted.

Conclusion: In patients with gout the SUA levels correlate with number of flares experienced in the past 12 months and the presence of tophi. The increase number of acute gout flares and tophi are associated with significant decrements in HRQOL, work productivity, and increased healthcare resource utilization.

Keywords: gout, quality of life, uric acid and utilization review

Disclosure: P. Khanna, None; A. K. Tausche, Savient Pharmaceuticals Inc., 5; A. Forsythe, Savient Pharmaceuticals, Inc., 3; A. Goren, Savient Pharmaceuticals, Inc., 5; D. Khanna, Consultant, speaker, 5.