Case	Age	HIV, Y	TN, Y	Sx	VAS	BMI	alkphos	PO4	Cr	K+	NTX	FemN	LS
1	49	10	4	8	80	20.4	309	2.2	1.80	2.9	128	-3.5	-4.2
2	69	32	10	8	70	18.0	245	1.5	1.33	4.2	57	-2.6	-2.3
3	61	30	7	36	84	20.0	576	1.2	1.18	3.3	98	-3.2	-3.8

Y = years, Sx = symptoms in months, VAS = visual analogue scale, alkphos = alkaline phosphatase (39–117 IU/L), PO4 = phosphorus (2.5–4.5mg/dL), Cr = creatinine (0.76–1.27mg/dL), K+ = potassium (3.5–5.2mml/L), FemN = femoral neck T-score, LS = lumbar spine T-score.

sacrum in all three patients. A MRI of the knee showed bone marrow edema in case 2 and an atypical longitudinal fracture of the femur in case 3. Tenofovir was withdrawn, oral phosphates given, and resolution of pain and biochemical changes occurred in 4–8 months. Bone mineral density in case 1 repeated 1 year after presentation increased 16% in the femoral neck and 19% in the lumbar spine.

The laboratory and clinical features in our cases shared with those previously reported include long duration of HIV and tenofovir treamtent, severe pain and disability, low BMI, neuropathy, hypogonadism in men, elevation of alkaline phoshatase and varying degrees of renal tubular dysfunction.

Conclusions: Long term tenofovir therapy in HIV patients can induce a devastating disabling osteomalacia caused by hypophosphatemia with features of Fanconi syndrome with or without vitamin D deficiency. A long standing history of HIV infection, low BMI, neuropathy, and hypogonadism in male patients may predispose or be associated with this complication. A serum phosphorus, alkaline phosphatase, and urinalysis should be followed regularly in all tenofovir treated patients to avoid the consequences of osteomalacia.

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AB0889 FACTORS CONTRIBUTING TO LENGTH OF INPATIENT HOSPITAL STAY FOR PATIENTS WITH ACUTE GOUT ARTHROPATHY AT THE NORTHERN HOSPITAL: AN OBSERVATIONAL STUDY

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Background: Gout is a common inflammatory arthropathy with a reported prevalence ranging from 1.7% to 4% within Australia – one of the highest in the world, second only to New Zealand.[1] Epidemiological studies have established that its prevalence has increased steadily over recent years, with the impact of the disease on the rise.[2]

Gout has painful and debilitating effects on patients leading to impact on their quality of life. Even though usually managed in the primary care setting, many patients are ultimately admitted as inpatients to hospital with the associated increased resource utilisation and cost. There is a growing recognition of the economic burden of gout.[3] A Canadian study estimated 5-year total health costs of patients with gout at $10,332 more than comparable gout free patients.[4]

Objectives: To identify factors potentially contributing to increased length of inpatient hospital stay for acute exacerbations of gout in a teaching hospital in Melbourne, Australia.

Methods: Patients admitted to The Northern Hospital, Melbourne, Australia with a discharge diagnosis of gout as their only acute medical problem between 1st July 2014 and 30th June 2016 were identified using ICD-10 disease coding from institutional compensation reports. Retrospective chart review was performed identifying length of stay and for variables which may potentially affect it.

Results: 121 patients were discharged with an acute gout flare over the 2 years with a mean age of 66±15 years. The vast majority of patients in this cohort were male (86%). The mean length of stay was 2.3 days (95% CI 1.83–2.78 days), with a median of 1 day. The median length of hospital stay was increased by 2 days if patients lived alone (p=0.042) and 1 extra day if the C-Reactive Protein (CRP) measured at admission was >100 mg/L (p=0.001). Hospital stay was similarly prolonged by a single day if more than one joint was involved in the flare (p=0.003).

Conclusions: Gout without antecedent acute medical comorbidity is a common acute medical presentation to hospital with a large corresponding economic burden. Factors affecting length of inpatient stay include social status, marked elevation of CRP and polyarticular involvement. This study identifies factors which warrant further investigation as to how they may be ameliorated in order to improve health resource utilisation.

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AB0890 SYSTEMIC LUPUS ERYTHEMATOSUS AND GOUT: REALLY AN UNUSUAL ASSOCIATION?

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Background: Patients with systemic lupus erythematosus (SLE) often suffer from cardiovascular comorbidity such as hypertension, dyslipidemia or coronary heart disease. However, the association with gout – an independent cardiovascular risk factor – is considered unusual - it is not reported in the EULAR textbook (1)-, and might not be taken into account when acute arthritis occurs in SLE patients, also due to the predominance of women in this disease.

Objectives: To review our experience regarding SLE patients who developed gout, and to perform a literature review of reported cases to date.

Methods: Retrospective review of patients with SLE and crystal-proven gout in our Rheumatology Unit, a tertiary care center. We recorded clinical and laboratory variables related to both diseases. Then, we performed a bibliographical review in Pubmed (1965 – 2016) to identify reported cases of coexistence of both diseases.

Results: Out 189 SLE patients seen in our Unit, we have identified two cases with crystal-proven gout: 1) A 68 years-old woman with SLE and nephritis diagnosed 30 years ago, who developed polyarthritis affecting her hands. 2) A 47 years-old man with lupus for 22 years with nephritis and renal failure, who developed acute arthritis involving right knee and ankle. In both cases, urate crystals were demonstrated at synovial fluid. The table shows the results of the literature review together with our two cases. To date, 36 cases with coexistent SLE and gout have been reported. Median age at time of gout diagnosis was 43.5 years (p25–75 32.5–52.0), being 26 females (72%). SUA levels were found notably high (median 13.5mg/dL), and tophi, a marker of gout severity, were demonstrated in almost half of cases (44.4%). The majority of patients (91%) were on glucocorticoids at time of gout diagnosis. According to common factors leading to hyperuricemia, lupus-related renal damage (86%) and use of diuretics (83%) predominated in the series.

Ref.	Sex & Age (years)	Lupus Nephritis	Diuretics	Corticoids	Time between SLE and gout diagnoses (years)	Acute arthritis	Tophi	SUA at diagnosis (mg/dL)	Other crystals in synovial fluid
Quilis 2017	F 65	Yes	No	No	30	Yes	No	11.1	No
	M 47	Yes	No	No	22	Yes	No	12.2	No
Moidel 1981	M 48	Yes	Yes	Yes	11	Yes	No	10.8	No
	F 39	Yes	Yes	?	10	?	Yes	12	No
Wall 1982	M 45	Yes	Yes	Yes	10	Yes	No	8.8	No
Rose 1982	F 34	No	No	Yes	1,5	Yes	No	?	CPP, hydroxyapatite
Helliwell 1982	M 39	Yes	?	Yes	12	Yes	Yes	14.8	No
Lally 1982	F 29	Yes	Yes	Yes	9	Yes	No	10.2	No
Bradley 1983	F 31	Yes	Yes	Yes	4	Yes	Yes	16.5	No
	F 57	Yes	?	Yes	20	Yes	Yes	9.5	No
Rodríguez 1984	F 17	Yes	Yes	Yes	5	No	Yes	12	CPP, hydroxyapatite, cholesterol
Greenfield 1985	F 56	Yes	Yes	Yes	12	Yes	No	13-18	No
	M 41	Yes	Yes	Yes	14	Yes	No	9	No
Tsuboi 1986	F 25	Yes	Yes	Yes	7	No	Yes	12.2	No
Frocht 1987	F 37	Yes	Yes	Yes	7	Yes	No	12.9	No
McDonald 1988	M 43	Yes	Yes	Yes	10	No	Yes	8.3-10.8	No
Kalmar 1982	F 47	Yes	Yes	Yes	6	No	Yes	16.1	No
Alarcon 1983	F 52	No	?	?	14	Yes	No	18	No
Kurita 1989	F 37	Yes	Yes	Yes	15	No	Yes	11.4	No
Veerapen 1993	F 31	Yes	?	Yes	11	Yes	Yes	11.5	No
	M 24	Yes	Yes	Yes	6	Yes	Yes	15	No
	M 22	Yes	Yes	Yes	4	Yes	Yes	10.1	No
McMillen 1994	F 52	Yes	?	Yes	7	Yes	No	6.9	No
Ho 2003	F 61	No	Yes	Yes	6	Yes	Yes	17.3	No
	F 37	Yes	Yes	Yes	5	Yes	Yes	17.5	No
	F 30	No	Yes	Yes	8	Yes	No	12.9	No
	F 50	Yes	Yes	Yes	13	Yes	Yes	10.3	No
	F 68	Yes	Yes	Yes	4	Yes	No	9.9	No
	F 77	No	Yes	Yes	14	Yes	Yes	9.2	No
	F 33	Yes	Yes	Yes	7	Yes	No	11.2	No
Bajaj 2004	F 22	Yes	No	Yes	9	?	?	18.4	No
	F 44	Yes	Yes	Yes	10	?	?	15.1	No
	M 46	Yes	Yes	Yes	9	?	?	15.1	No
	M 47	Yes	No	Yes	31	?	?	13.4	No
	F 53	Yes	Yes	No	4	?	?	15.1	No
	F 55	Yes	Yes	Yes	21	?	?	6.7	No

Conclusions: Data supports including gout into the differential diagnosis of episodes of acute arthritis in SLE patients. This makes crucial the routine analysis of all synovial fluid samples, but especially in patients with long-term disease, renal impairment, and diuretic use.

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