± 19.1 and 23.5 ± 13.7 ($p=0.024$). Clinical findings related to RA and OP at baseline were as follows; CRP 1.2 ± 1.4 and 0.4 ± 1.0 mg/dl ($p=0.012$); DAS-CRP 3.14 ± 1.24 and 2.40 ± 1.24 ($p=0.019$); m-HAQ 1.27 ± 0.81 and 0.70 ± 0.73 ($p=0.018$); P1NP 59.7 ± 41.3 and 53.0 ± 26.2 $\mu\text{g/L}$ ($p=0.694$); TRACP-5b 528 ± 269 and 493 ± 192 mU/dL ($p=0.986$); LS-BMD 0.86 ± 0.20 and 0.81 ± 0.16 g/cm² ($p=0.285$) and TH-BMD 0.60 ± 0.12 and 0.60 ± 0.08 g/cm² ($p=0.899$). The rate of decreased P1NP from baseline to 6, 12, 24 and 36 months were each -20.6% vs -40.0% ($p=0.110$) at 6 month, -3.5% vs -42.0% ($p=0.046$) at 12 month, -8.7% vs -32.4% ($p=0.113$) at 24 month and -16.8% vs -33.7% ($p=0.215$) at 36 month and TRAC-5b were -25.9% vs -39.6% ($p=0.847$) at 6 month, -17.5% vs -36.4% ($p=0.111$) at 12 month, -19.5% vs -30.3% ($p=0.521$) at 24 month and -20.2% vs -29.5% ($p=0.513$) at 36 month in the GS +vs GS- group. The rate of increased LS-BMD from baseline to 6, 12, 24 and 36 months were each 4.1% vs 4.1% ($p=0.753$) at 6 month, 5.5% vs 6.7% ($p=0.587$) at 12 month, 10.4% vs 7.3% ($p=0.043$) at 24 month and 12.3% vs 12.6% ($p=0.738$) at 36 month and TH-BMD were 3.3% vs 3.2% ($p=0.892$) at 6 month, 1.3% vs 4.3% ($p=0.751$) at 12 month, 6.2% vs 5.0% ($p=0.838$) at 24 month and 8.4% vs 6.0% ($p=0.889$) at 36 month in the GS +vs GS- group (figure1 and 2).

Figure 1. The rate of increased LS-BMD from baseline to 36 month

Figure 2. The rate of increased TH-BMD from baseline to 36 month

Conclusions: DMB was effective in OP of RA patients. Oral prednisolone use did not influence the efficacy of DMB for 36 months.

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Fibromyalgia

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CROSS-SECTIONAL ANALYSIS OF THE ASSOCIATIONS BETWEEN FIBROMYALGIA AND CANCER

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Background: Fibromyalgia syndrome (FMS) is defined as chronic widespread musculoskeletal pain and tenderness with concomitant mood and cognitive dysfunction. Several comorbidities have been reported to be associated with FMS. However, these studies are mostly based on small populations and lack solid evidence.

Objectives: To evaluate the association of FMS with Cancer diagnoses.

Methods: This cross-sectional study used the database of the largest Health Maintenance Organisation in Israel, Clalit Health Services, serving more than 4 million members. FMS patients were compared to age- and sex-matched controls regarding comorbid Cancer diagnoses. Chi-square and t-tests were used for univariate analysis.

Results: Our study utilised data from 14,296 FMS patients and 71 324 age- and sex-matched controls. FMS patients compared to controls had a higher proportion of the following types of cancer: Cervix and Uteri, Connective Tissue Sarcoma, Thyroid, Non Hodgkin Lymphoma (NHL) and Benign brain tumours (OR=1.39, 1.60, 1.68, 1.26, 1.87 respectively, P value<0.005) – See table 1.

Characteristics	Fibromyalgia N=14,296	No Fibromyalgia N=71,324	Odds ratio	P-value
Age	55.2±13.9	56.0±13.7	1.00 [0.99;1.00]	<0.001
Females	13210 (92.4%)	65910 (92.4%)	1.00 [0.93;1.07]	0.978
BMI	29.1±6.20	28.0±6.01	1.03 [1.03;1.03]	<0.001
Smoking	4679 (32.7%)	19987 (28.0%)	1.25 [1.20;1.30]	0.000
SES				
Low	6669 (46.8%)	27747 (39.2%)	Ref.	Ref.
Medium	5397 (37.9%)	27499 (38.8%)	0.82 [0.78;0.85]	0.000
High	2182 (15.3%)	15554 (22.0%)	0.58 [0.55;0.61]	0.000
Malignancy diagnosis				
Cervix / Uteri	50 (0.35%)	180 (0.25%)	1.39 [1.01;1.89]	0.046
Connective Tissue Sarcoma	32 (0.22%)	100 (0.14%)	1.60 [1.06;2.36]	0.026
Thyroid	150 (1.05%)	448 (0.63%)	1.68 [1.39;2.02]	<0.001
Non Hodgkin Lymphoma (NHL)	99 (0.69%)	394 (0.55%)	1.26 [1.00;1.56]	0.048
Benign Brain Tumor	182 (1.27%)	490 (0.69%)	1.87 [1.57;2.21]	<0.001

Adjusted for age, sex, SES, smoking and BMI

BMI: Body mass index, kg/m²; SES: Socioeconomic status

Figure 1. BMI: Body mass index, kg/m²; SES: Socioeconomic status

Conclusions: Study results show a higher proportion of malignancy diagnoses amongst FMS patients compared to matched controls. Accordingly, in treating FMS patients, physicians should bear in mind the likelihood of concomitant tumour as it might explain various FMS symptoms, and more importantly, shorten a patients' time for diagnosis and treatment of the oncological condition.

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