Conclusion: The spectrum of clinical presentations in Indian patients is different from those reported in previous cohorts. Anti TNF therapy was effective in majority.

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SAT0245   **CHOROIDAL EVALUATION IN PATIENTS WITH CHILDHOOD POLYARTERITIS NODOSA (PAN) ANDADENOSINE DEAMINASE-2 DEFICIENCY (DADA-2)**

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Background: Polyarteritis nodosa (PAN) is a systemic necrotizing vasculitis affecting small or medium arteries with a negative ANCA serology and no evidence of glomerulonephritis.
Objectives: The aim of this study was to evaluate the choroid with optical coherence tomography (OCT) in children with polyarteritis nodosa (PAN) and adenosine deaminase-2 deficiency (DADA-2).
Methods: The study included all PAN and DADA-2 patients (n=15), examined between June 2017 and September 2018, and an age and gender-matched control group (n=15). After ocular examination, choroidal images taken with sd-OCT (Heidelberg Spectralis) were evaluated with regard to choroidal thickness (ChT) at five points (750 and 1500 microns from the center of the fovea both in the temporal, nasal quadrant and under the fovea), total subfoveal choroidal area (TCA), luminal area (LA), stromal area (SA) and choroidal vascularity index (CVI).
Results: None of the patients had active ocular complaints or findings. The mean (±SD) age was 8.4 ± 3.69 years. ChT at 3 points, TCA, LA, and SA were found to be higher in patients with PAN and DADA-2. The CVI values were similar in both groups. No correlations were found between the OCT findings, activity score index (PVAS) and the biochemical parameters (Erythrocyte sedimentation rate, leukocyte, C-Reactive Protein).
Conclusion: The results of this study showed that the choroid was thicker in patients with PAN and DADA-2 than in the control group, suggesting that PAN and DADA-2 may affect the choroid. Ophthalmologic evaluation is important in PAN and DADA-2 patients, even in the absence of relevant complaints.

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SAT0246   **USING BONE MINERAL DENSITY VERSUS THE RATIO OF BODY MASS INDEX TO BONE MINERAL DENSITY TO PREDICT FRACTURE RISK IN POLYMYALGIA RHEUMATICA**

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Background: Polymyalgia Rheumatica (PMR) is the commonest inflammatory rheumatic condition that affects the elderly population and treatment with long-term corticosteroids is common[1]. Whilst steroid treatment is beneficial in managing symptoms, it has many side effects including increasing the risk of osteoporosis and hence fractures[2]. There has been recent research that suggests using the ratio of BMD to Body Mass Index (BMI) is a better marker of predicting fracture risk in obese patients than BMD alone[3].
Objectives: Our research set out to find out whether BMD alone or the ratio of BMI to BMD is a better predictor of fracture risk in patients with PMR.
Methods: Data were used from a cohort of PMR patients referred for DEXA scan to a District General Hospital between June 2004 and October 2010. The following were recorded: age, sex, whether a fracture was sustained, whether they had had steroid therapy at any point, BMI, BMD at L1-L4, BMD at femoral neck (left and right) and BMD at hip (left and right). Logistic regression models were fitted using fracture as the dependent variable. The independent variables for the first set of logistic regression models were BMD at each level and for the second set BMI: BMD ratio at the same levels. Data were adjusted for sex and age at scan. Logistic models were compared using area under the ROC curves (AUC).
Results: 714 patients were used in the study, of whom 532 (75%) were female. Mean age was 70.5 (SD 8.84) with age range 45.8 to 96.5 years. 703 (98%) were recorded to have had steroid therapy at any point. Mean BMI was 28.2 kg/cm² (SD 5.24). 156 (22%) had sustained a fracture. Odds ratios and AUC values for each level were as shown in the table. The fit of the models using the BMD alone was superior to the fit of the models using the ratio as the AUC values were greater for BMD alone.

Table 1. – Odds ratios (age- and sex-adjusted) and AUC values

Level	Odds Ratio and CI (BMD)	AUC (BMD)	Odds Ratio and CI (BMI:BMD)	AUC (BMI: BMD)
L1	0.192 (0.0656, 0.560)	0.6789	1.04 (1.01, 1.07)	0.6621
L2	0.138 (0.0529, 0.358)	0.6977	1.06 (1.03, 1.09)	0.6777
L3	0.192 (0.0795, 0.463)	0.6881	1.06 (1.03, 1.09)	0.6730
L4	0.243 (0.108, 0.544)	0.6837	1.05 (1.02, 1.09)	0.6731
L1 to L4	0.150 (0.0560, 0.400)	0.6837	1.06 (1.03, 1.09)	0.6737
L FEMORAL NECK	0.103 (0.0219, 0.492)	0.6727	1.04 (1.01, 1.06)	0.6576
R FEMORAL NECK	0.0785 (0.0143, 0.430)	0.6837	1.05 (1.02, 1.08)	0.6750
L TOTAL	0.0980 (0.0233, 0.412)	0.6824	1.06 (1.03, 1.10)	0.6777
R TOTAL	0.0623 (0.0136, 0.285)	0.6917	1.07 (1.04, 1.11)	0.6821

Conclusion: This study identifies that the BMI:BMD ratio does not provide better indication of fracture risk than BMD alone in our cohort of patients with PMR. We have previously shown that the same is true for patients with rheumatoid arthritis. A limitation of this study is not stratifying by steroid use.
Further work will be done to study the role of the ratio in predicting fracture risk in patients with other conditions.

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