Skeletal effects of hypoparathyroidism (HypoPT); data from the Canadian National Hypoparathyroidism Registry (CNHR)



S Hussein^{1,2}, AA Khan^{1,2}, H Afifi², H AbuAlrob^{1,2}, D Ali^{1,2}, R Abu Fardeh^{1,2}, A Almoulia², A Azharruddin^{1,2}, D Bole², M Braga^{1,2}, P Chandra³, A Cheng⁴, R Cheung⁵, JEM Young¹, N Firdous^{1,2}, H Juta², S Khan^{2,4}, T Khan⁵, J Malhem², H Malik^{1,2}, S Mehmood², A Millar⁴, E Morgante², F Naveed², H Niazi², T Paul⁵, A Prebtani¹, Z Punthakee¹, J Shaban⁵, R Shah¹, M Shrayyef⁴, M Shaikh^{1,2}, C Tagra^{1,2}, S Teschke¹, I Treki⁵, R Tauqir^{1,2}, S Van Uum⁵, R Wilson⁵, & M Ovize⁶.

McMaster University¹, Bone Research & Education Centre², Brampton Hospital³, University of Toronto⁴, Western University⁵, Amolyt Pharma, Ecully, France⁶.

INTRODUCTION

The CNHR registry was established in 2014 with the objectives of identifying the etiology, presentation, natural history, and current treatment of hypoPT. (1) The population of the cohort is fairly representative of the HypoPT population in Canada.

METHODS

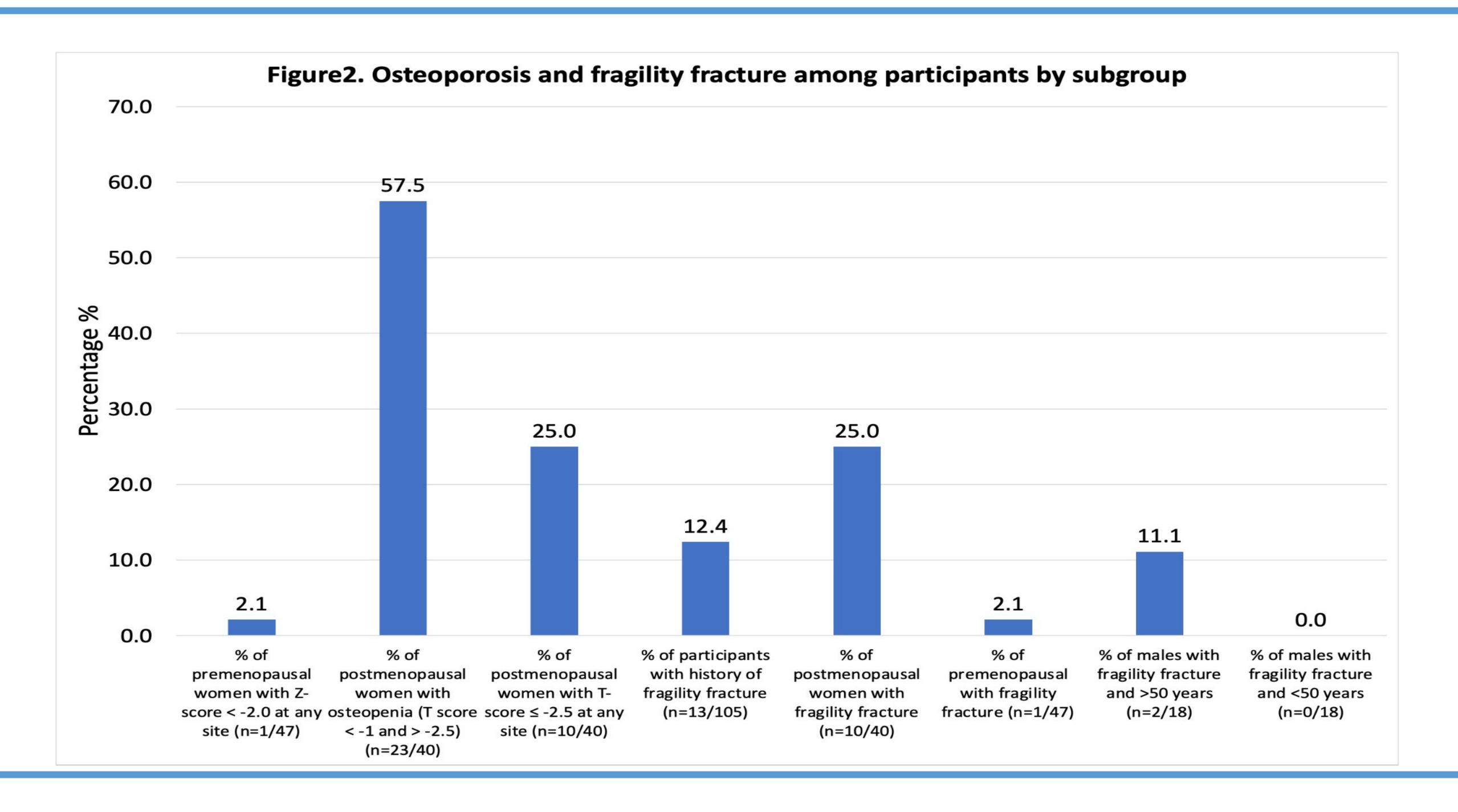
105 patients with hypoPT were included in this prospective study. Patients completed baseline assessments, including 3-site bone mineral density (BMD), trabecular bone score (TBS), fracture risk assessments, and bone biomarkers. Among these, only BMD and fragility fractures are presented in this analysis.

CONCLUSION

The effects of hypoPT on bone strength are not fully understood at this time. (2) We observed in postmenopausal women a significant prevalence of osteopenia (57.5%), osteoporosis by BMD criteria (25%), or with a prior fragility fracture (25%) as assessed clinically and by 3-site BMD.

RESULTS

Table 1: Patients' demographics	
Participants (n)	105
Age, mean (SD)	51.9 Y (16.4)
Age of the disease, mean (SD)	39.7 Y (17.3)
Duration, mean (SD)	11.3 Y (8.6)
BMI kg/m ² , mean (SD)	28.9 (7.8)
Male, n (%)	18 (17%)
Female, n (%)	87 (83%)
Premenopausal female, n (%)	47 (54%)
Postmenopausal female, n (%)	40 (46%)
Postsurgical hypoparathyroidism, n (%)	75 (71%)
Non-surgical hypoparathyroidism, n (%)	30 (29%)



REFERENCES

1. Khan AA, AbuAlrob H, Punthakee Z, Shrayyef M, Werfalli RE, Kassem HA, Braga M, Millar A, Hussain S, Iqbal S, Khan T, Paul T, Van Uum S, Young JEM. Canadian national hypoparathyroidism registry: an overview of hypoparathyroidism in Canada. Endocrine. 2021 May;72(2):553-561. doi: 10.1007/s12020-021-02629-w. Epub 2021 Mar 2. PMID: 33655415.

2. Khan AA, Bilezikian JP, Brandi ML, Clarke BL, Gittoes NJ, Pasieka JL, Rejnmark L, Shoback DM, Potts JT, Guyatt GH, Mannstadt M. Evaluation and Management of Hypoparathyroidism Summary Statement and Guidelines from the Second International Workshop. J Bone Miner Res. 2022 Dec;37(12):2568-2585. doi: 10.1002/jbmr.4691. Epub 2022 Nov 14. PMID: 36054621.

DISCLOSURES