STATEMENT OF RESEARCH ACHIEVEMENTS ON WHICH ANY AWARD HAS ALREADY BEEN RECEIVED BY THE APPLICANT

1. Recipient of C. Wayne Bardin, MD, International Travel Award 2022

The C. Wayne Bardin, MD, International Travel Award was created in the honor of Dr. Wayne Bardin, who made remarkable research contributions to both reproductive physiology and contraception throughout his long career. This award honors an exceptional ENDO Annual Meeting abstract submission from an author outside the United States.

The C. Wayne Bardin, MD, International Travel Award for the year 2022 was endowed to me by the Endocrine Society in its annual conference named ENDO 2022 held at Atlanta, USA. I was the first Indian and till now the only Indian to have received this ward. The award was presented based on the quality of the abstract presented at ENDO 2022 and also based on my overall research work.

The research work for which this award was endowed was entitled, "Asian-Indians With Symptomatic Primary Hyperparathyroidism Have Lower Body Weight At Presentation And Tend To Gain Weight Post-Curative Parathyroidectomy" (*https://doi.org/10.1210/jendso/bvac150.410*). The data pertain to patients with primary hyperparathyroidism (PHPT). Patients with primary hyperparathyroidism (PHPT) have higher body weight than their eucalcemic peers. However, most of the data is based on Caucasian PHPT patients who predominantly have an asymptomatic presentation. Similar data from Asian-Indian patients with PHPT who primarily have symptomatic disease are unavailable. In this regard, we planned to conduct a retrospective observational study to look into the dynamics of body weight in Asian-Indian PHPT patients.

Patients with PHPT had lower body weight compared to an equal number (n=243) of age- and sex-matched community-dwelling healthy controls ($p<0.001$ for both men and women). At median follow-up of 1 year, the mean postoperative body weight was 64.7±12.6 kg. The median (interquartile range) percent change is body weight was +6.7% (+2.1, +14.0). Increase in body weight was noted in 198 patients (81.5%). Univariate analysis showed that patients with postoperative weight gain were younger ($p=0.029$), had lower body weight ($p<0.001$), were more likely to be symptomatic ($p=0.002$), and more likely to have weight loss ($p=0.041$) and gastrointestinal symptoms ($p=0.016$) at presentation compared with patients with no weight gain. Similarly, patients with weight gain had biochemically severe disease. Thus, Asian-Indians with symptomatic PHPT have lower body weight than healthy controls, likely because of significant gastrointestinal manifestations that compromise food intake. It is plausible that following reinstatement of eucalcemia, appetite improves, resulting in increased food intake and subsequent weight gain.

Past Recipients: Bardin International Travel Award

▾Bardin Award 2022 Recipient

2022 Recipient: Rimesh Pal, MD, DM

Dr. Rimesh Pal is an Assistant Professor (Junior Faculty) with full-time appointment in the Department of Endocrinology at the premier Postgraduate Institute of Medical Education and Research (PGIMER), Chandigarh, India. He completed his Bachelor of Medicine and Bachelor of Surgery (MBBS) degree in 2013, Doctor of Medicine (MD) degree in Internal Medicine in 2016 and Doctorate of Medicine (DM) degree in Endocrinology from PGIMER in 2019. He is an astute and dedicated physician, highly motivated academician and a keen researcher. His research ideas are original and scientifically sound. He has particular interest in the fields of metabolic bone diseases, osteoporosis, primary hyperparathyroidism, sarcopenia, type 2 diabetes and endocrinological aspects of COVID-19. In his hitherto short career, he has published more than 85 PubMed indexed articles, including publications in The Lancet Diabetes and Endocrinology, Diabetes Research and Clinical Practice, Osteoporosis International, Journal of Endocrinological Investigation, Frontiers in Endocrinology, and Endocrine Connections, among others. His publications are a result of collaborative work with researchers from PGIMER as well as from other parts of India and across the globe.

Can be assessed from the link: ***https://www.endocrine.org/awards/c-wayne-bardin-md-international-travel-award***

2. Outstanding Abstract Award and Presidential Poster Competition Winner 2023

The aforementioned awards are endowed by the Endocrine Society. I received both the awards for my research work presented in the annual conference of the Endocrine Society named ENDO 2023 held at Chicago, USA. The title of the research abstract presented was entitled, "Randomized Controlled Trial Comparing The Efficacy Of Teriparatide, Zoledronate And Denosumab In Postmenopausal Women With Type 2 Diabetes Mellitus At High Risk Of Fragility Fractures: 6-Month Interim Analysis Of HR-pQCT Parameters". In this randomized controlled trial (RCT), we recruited post-menopausal women with T2D and associated osteoporosis and randomized them to receive any of the 4 allocated treatments: yearly zoledronate 5m intravenous, biannual sc denosumab 60 mg, daily sc teriparatide 20 mcg or only standard of care, i.e., calcium and vitamin D3 supplement (control). The primary endpoint was the change in lumbar spine and femoral neck bone mineral density at 18 months. One of the interim exploratory endpoints was the change in bone microarchitecture as assessed by high-resolution peripheral quantitative computed tomography (HR-pQCT) after 6 months of therapy. All the baseline parameters were matched between the 4 groups suggestive of perfect randomization. At 6 months, we observed that teriparatide and zoledronate lead to a significant improvement in trabecular number (Tb.N) at the distal radius compared to the control arm. At the distal tibia, total volumetric BMD (Tt.vBMD) impoved with teriparatide and zoledronate compared to the control group. With regard to cortical volumetric BMD (Ct.vBMD), there was a significant increase in Ct.vBMD with zoledronate and denosumab as compared to the control group. As expected, bone turnover markers (PINP, CTX) showed a significant rise with

teriparatide while they got significantly suppressed with the use of zoledronate or denosumab.

Presidential Poster Competition Winners 2023

▾Poster Winners: June 15, 2023

Topic	Winner	Abstract
Bone and Mineral Metabolism	Rimesh Pal	Randomized Controlled Trial Comparing The Efficacy Of Teriparatide, Zoledronate And Denosumab In Postmenopausal Women With Type 2 Diabetes Mellitus At High Risk Of Fragility Fractures: 6-Month Interim Analysis Of HR-pQCT Parameters

Can be assessed from the link: ***https://www.endocrine.org/meetings-and-events/endo2023/call-for-abstracts/abstract-awards***