were (4.2cm vs 14.8cm)/year and (4cm vs 17.6cm)/year, (47 vs 329) $\hat{A}\mu$ mol/L and (<15 vs 205) $\hat{A}\mu$ mol/L, respectively. Hypoglycaemia, a common side effect of treatment was not reported. H's percentage body fat and muscle mass improved from 54.1% to 52% and 10.8kg to 12.4kg. One year treatment for both siblings' costs RM751,500 (USD 182,624.57).

CONCLUSION

LS is rare, yet a treatable cause for severe short stature. Albeit the exorbitant cost, treatment offers positive outlook.

PE-03

VITAMIN D DEFICIENCY RICKETS – A CASE SERIES: 'A TIP OF THE ICEBERG'

https://doi.org/10.15605/jafes.036.S96

Naveen N,1 Cheah YK,1 Jeanne WSL2

¹Department of Paediatrics, Hospital Tuanku Ja'afar Seremban, Malaysia,

²Department of Paediatrics, Hospital Putrajaya, Malaysia

INTRODUCTION

Vitamin D deficiency is the most common cause of rickets worldwide. In Malaysia, owing to the abundant sunlight exposure, it is believed to be uncommon, however it is likely to be under-reported. In addition, dietary calcium deficiency is an important cause of nutritional rickets in children above 1 year old in developing countries.

RESULTS

We report a case-series of 4 unrelated Malaysian children (aged between 1 to 3) born in Istanbul, Turkey presented with the classical clinical features and biochemical changes of rickets. They were all exclusively breast-fed during infancy with poor dietary calcium intake. Their workup showed normal Calcium, high Alkaline Phosphatase, low Vitamin D and high Parathyroid hormone levels, with radiographic changes of fraying and spraying of the wrist, consistent with Vitamin D Deficiency Rickets. Bowing of legs and widening of wrists joints also seen. Low maternal Vitamin D levels also support the diagnosis. All four children were treated with cholecalciferol (vitamin D3) and short-term calcium supplements. The children showed improvements in growth and normalization of biochemical parameters on follow-ups.

CONCLUSION

Meta-analysis in Turkish populations have shown high prevalence of Vitamin D deficiency leading to their national policy of vitamin D supplementation for infants. Our patients in this case series were neither immunized nor received the appropriate supplements during their stay in Istanbul, Turkey. Maternal vitamin D deficiency, restricted sunlight exposure due to clothing style and seasonal variations, poor dietary calcium intake were all the contributing factors to the nutritional rickets in our patients. Maternal Vitamin D levels could serve as an early indicator of possible deficiency if detected early. Awareness amongst our population was scarce, leading to a delay in seeking treatment/intervention. This case series aims to highlight the importance of vitamin D supplementation as well as ensuring adequate dietary calcium in prevention of nutritional rickets.

PE-04

A CLINICAL PROFILE OF MALAYSIAN PRE-SCHOOL CHILDREN WITH TYPE 1 DIABETES: OBSERVATIONS FROM A SINGLE CENTRE

https://doi.org/10.15605/jafes.036.S97

Meenal Mavinkurve,^{1,2} Muhammad Yazid Jalaludin,^{2,3} Annie Leong,² Mazidah Noordin,^{2,4} Nurshadia Samingan,² Azriyanti Anuar Zaini^{2,3}

¹Department of Paediatrics, School of Medicine, International Medical University, Seremban, Malaysia

²Department of Paediatrics, University Malaya Medical Centre, Kuala Lumpur, Malaysia

³Department of Paediatrics, Faculty of Medicine, University Malaya, Kuala Lumpur, Malaysia

⁴Department of Paediatrics, University Teknologi Mara (UiTM), Sungai Buloh, Malaysia

INTRODUCTION

Type 1 diabetes (T1DM) is the most common form of childhood diabetes in Malaysian children, the median age being 7.6 years. Worldwide, younger children are increasingly being diagnosed with T1DM, especially in the under 5's age group. Vague clinical symptoms may lead to a protracted presentation and increase the risk of severe complications. This study aims to report the clinical characteristics of Malaysian pre-school (<7 years) children with T1DM.

METHODOLOGY

A retrospective review of the demographic and clinical data on children < 7 years of age diagnosed with T1DM at the University of Malaya Medical Centre between January $1^{\rm st}$ 2010-Dec $31^{\rm st}$ 2019 was conducted.