

groups living in other environments, which might impact how they perceive things. Besides, education level and health education would somehow influence how people perceive things. Systolic and diastolic BP and body mass index were expected to have significant relationships with treatment adherence. As diet control and weight control are poor, which means treatment adherence is poor, the BMI will be uncontrolled as well and leads to uncontrolled BP.

Conclusion Systolic and diastolic blood pressure, BMI, and the number of antihypertensive medications taken daily were the predicting factors for treatment adherence.

APCU 06 MULTIPLE MYELOMA COEXISTENCE WITH CARDIAC AMYLOIDOSIS

^{1,2}Nurul Miftah Binti Mohd Sabri, ^{1,2}Nik Ahmad Hilmi bin Nik Mohd Zaid, ^{1,2}Siti Aisyah Hussin, ^{1,2}W Yus Haniff W Isa MD, ^{1,2}Zurkurnai Yusof, ^{2,3}Abu Dzarr Abdullah. ¹Cardiology Unit, Hospital Pakar Universiti Sains Malaysia, Malaysia; ²School of Medical Sciences, Universiti Sains Malaysia, Malaysia; ³Department of Hematology, School of Medical Sciences, Universiti Sains Malaysia, Malaysia

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Introduction AL amyloidosis may develop in patients with multiple myeloma (MM) or may progress from monoclonal gammopathy of undetermined significance (MGUS). Coexistence of MM with cardiac amyloidosis is very rare. We are reporting a case of newly diagnosed of multiple myeloma concomitant with features of cardiac amyloidosis.

Case Presentation 56 years old lady who was diagnosed with End Stage Renal Failure on regular dialysis since October 2023. Her laboratory results showed normocytic normochromic anaemia with impaired renal function and hypercalcemia. Her serum paraprotein showed presence of IgD Lambda paraprotein band with concentration of 6g/L at gamma region with raised serum lambda free light chain. The results of bone marrow biopsy specimen was consistent with MM evidenced by presence >10% plasma cells infiltration. Tissue fat biopsy showed positive Congo red stain, consistent with amyloid deposition. Echocardiogram demonstrated concentric left ventricular hypertrophy (LVH) with speckled appearance of the myocardium and apical sparing pattern. Her left ventricular ejection fraction (LVEF) was 62%.

Discussion The diagnosis of cardiac amyloidosis is primarily identified through the characteristic global longitudinal strain (GLS) apical sparing pattern, combined with concentric left ventricular hypertrophy. To further differentiate between AL and ATTR amyloidosis, a nuclear scan or cardiac MRI can be utilized. However, in this case, the presence of renal impairment complicates further diagnostic confirmation. The patient's critically ill condition also poses significant challenges for additional workup. The coexistence of both multiple myeloma and cardiac amyloidosis complicates monitoring but offers some advantages. Beyond tracking paraprotein levels, serial echocardiograms can provide valuable insights into the patient's response to treatment. However, these assessments require the expertise of an experienced echocardiographer to ensure accurate classification of treatment response. This is a rare clinical scenario, as documented in limited literature. In this case, treatment options are further constrained by the patient's

dependency on dialysis. Early diagnosis might have significantly altered the clinical course.

Conclusion Cardiac amyloidosis can occur alongside multiple myeloma, careful screening is essential to avoid overlooking this possibility. In addition to affecting prognosis, this combination with echocardiography assessment may provide an extra method to monitor the disease.

APCU 07 THE OUTCOME OF A YOUNG LADY WITH LUPUS CARDITIS

¹Nurul Nadiyah MZ, ¹Nik Ahmad Hilmi NMZ, ^{1,2}Raja Abdul Wafy RMR, ^{1,3}Zurkurnai Y, ^{1,3}Wan Yus Haniff WI, ^{1,3}Siti Aisyah H, ¹Nor Mardiah MY, ¹Wan Syamimee WG. ¹Cardiology Unit, Department of Internal Medicine, Hospital Pakar Universiti Sains Malaysia; ²Department of Medicine, Faculty of Medicine and Health Sciences, Universiti Putra Malaysia; ³School of Medical Sciences, Universiti Sains Malaysia, Malaysia

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Introduction Lupus carditis is a serious manifestation of systemic lupus erythematosus (SLE) affecting the heart. It is a significant contributor to morbidity and mortality in SLE patients caused by immune complex deposition in heart tissues leading to inflammation. Antinuclear antibodies (ANA) and anti-double stranded DNA (anti-dsDNA) antibodies, are commonly implicated. We report a case of lupus carditis in a young lady who improved following intravenous immunoglobulin (IVIG) on top of standard therapy.

Case Presentation A 38-year-old lady was admitted with one month history of fever, arthralgia, myalgia, and 5kg of unintentional weight loss. Initial investigations revealed pancytopenia and connective tissue disease (CTD) screening was negative. Her bone marrow aspiration and trephine biopsy suggested reactive marrow with dysplastic changes. She developed multiple episodes of altered sensorium and seizure, but brain imaging revealed no focal lesions or haemorrhages. Repeated CTD screening was positive for ANA (1:640 speckled pattern), anti-dsDNA, anti-ribosomal P protein, and anti-AMA M2. Later, she experienced cardiac arrest due to pulseless ventricular tachycardia, requiring resuscitation and defibrillation. Post-resuscitation echocardiography showed global hypokinesia with left ventricular ejection fraction (EF) of 25% and raised in ProBNP >9000. Thus, diagnosis of SLE involving multiple organs, including lupus carditis, cerebritis, musculoskeletal and haematological involvement was made. She was started high dose IVIG for 5 days together with intravenous cyclophosphamide for six cycles and tapering doses prednisolone. A follow-up echocardiography after six cycles of cyclophosphamide showed a significant improvement in EF from 25% to 60%, along with concentric remodelling.

Discussion Early and aggressive treatment is crucial in managing severe SLE with multiorgan involvement. Lupus carditis is rare but potentially fatal complication, affecting up to 10% of SLE patients. There were few case reports of patients with lupus carditis treated with mycophenolate mofetil and high dose corticosteroid, of which 50% showed significant improvement. However, there were limited case reports in the literature where IVIG was used with cyclophosphamide and prednisolone to treat lupus carditis. The gold standard for diagnosis of lupus carditis is endomyocardial biopsy, but not

routinely used due to its potential complications and non-specific. This case illustrated the novel use of IVIG with cyclophosphamide and prednisolone, significantly improving patient outcomes.

Conclusion Recognizing lupus carditis is vital so that appropriate therapy can be initiated. Early treatment with IVIG, in addition to standard immunosuppressive therapy, may be an alternative treatment in severe cases of lupus carditis, as demonstrated in this case.

APCU 08 KNOWLEDGE ON HYPERTENSION AMONG ADULT HYPERTENSIVE PATIENTS IN SABAH HEART CENTRE

¹C Su Yee, ²S Doris. ¹Gleneagles Hospital, Kota Kinabalu, Sabah, Malaysia; ²Malaysian Ministry of Health Training Institution, Kota Kinabalu, Sabah, Malaysia

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Introduction Hypertension is a major risk factor for cardiovascular disease. World Health Organization (WHO) stated that hypertension affects 1.28 billion of the population globally, with high prevalence in Malaysia. Effective management is crucial for reducing complications, yet inadequate patients' knowledge may hinder treatment adherence. Therefore, this study aimed to assess the level of knowledge on hypertension and its relationship with socio-demographic characteristics among adult hypertensive patients in Sabah Heart Centre.

Methods A descriptive, cross-sectional study was conducted to assess the level of knowledge on hypertension among 114 adult hypertensive patients. Data was collected using self-administered questionnaire and analysed using SPSS version 26.0. One-way ANOVA test, independent T-test, and Chi-Square Test were used to determine the relationship between participants' socio-demographic characteristics and their level of knowledge on hypertension.

Results The study findings revealed that 45.6% (n=52) of the respondents have poor knowledge, 30.7% (n=35) of them have moderate knowledge, and only 23.7% (n=27) of them have a good level of knowledge. The results also showed that there was a statistically significant relationship between the level of knowledge on hypertension and age ($p = 0.001$), educational level ($p = 0.009$), source of information ($p = 0.009$), and race ($p = 0.035$). In contrast, no significant relationship was found between the level of knowledge on hypertension and gender.

Discussion This study's results are mostly comparable to previous studies, while some in contrast with other studies. Poor hypertension knowledge, especially its risk factors, signs and symptoms, complications, and preventive measures, is alarming. Tailored educational strategies are suggested for effectively improving hypertension knowledge among specific groups.

Conclusion The results of this study highlighted the inadequate knowledge of hypertension among patients, which may affect timely diagnosis and management. This may increase the risk of serious complications like heart disease and stroke, leading to poorer health outcomes and higher healthcare costs. Targeted educational strategies, public health campaigns, and healthcare provider training should be focused on improving outcomes and reducing disparities in hypertension care globally.

APCU 09 NAVIGATING CHALLENGES AND OPPORTUNITIES IN CONGENITAL LONG QT SYNDROME MANAGEMENT

¹AS Amir Firdaus, ¹RMR Raja Abdul Wafy, ²MY Hartini. ¹Department of Medicine, Faculty of Medicine and Health Sciences, Universiti Putra Malaysia; ²Department of Cardiology, Hospital Sultan Idris Shah Serdang

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Introduction Autoimmune-associated congenital Long QT Syndrome (LQTS) is a rare cardiac disorder linked to maternal anti-Ro/SSA antibodies. These antibodies can cross-react with foetal cardiac ion channels, potentially leading to life-threatening arrhythmias. Thus, early diagnosis and management are crucial for improving outcomes.

Case Presentation A 39-year-old pregnant woman presented at 25 weeks' gestation with foetal bradyarrhythmia and early hydrops. Foetal echocardiography revealed dilated ventricles, decreased systolic function, and frequent ventricular arrhythmias. Maternal testing confirmed anti-Ro-60 positivity. The patient underwent multiple treatments, including intravenous immunoglobulin, magnesium sulphate, propranolol, and hydroxychloroquine.

Result Despite interventions, persistent foetal bradycardia necessitated emergency delivery at 34 weeks. The newborn presented with syndromic features and a low heart rate, requiring resuscitation. Unfortunately, the infant succumbed to complications on day 5 of life.

Discussion This case highlights the challenges in diagnosing and managing autoimmune-associated LQTS prenatally. Foetal echocardiography is crucial in early detection, revealing characteristic signs such as bradycardia, AV block, and ventricular arrhythmias. Recent studies suggest hydroxychloroquine may reduce the risk of advanced heart block when administered early in pregnancy. However, the long half-life of hydroxychloroquine presents both advantages and limitations in treatment timing.

Conclusion Autoimmune-associated congenital LQTS remains a complex and challenging condition to diagnose and treat prenatally. Early detection through foetal echocardiography and maternal antibody screening is vital. While current treatment options show promise, further research is required to optimize management strategies and improve outcomes for affected foetuses and newborns. Thus, multidisciplinary collaboration between obstetricians, paediatric cardiologists, and rheumatologists is essential to effectively care for these high-risk pregnancies.

APCU 10 ADHERENCE TO RISK FACTORS MODIFICATION AMONG PATIENTS WITH 6-MONTHS POST MYOCARDIAL INFARCTION IN SABAH HEART CENTRE

¹Nur Bazilah Jaim, ²Dona Cyrelina Chin. ¹Hospital Universiti Malaysia Sabah, Kota Kinabalu, Sabah, Malaysia; ²Malaysian Ministry of Health Training Institution, Kota Kinabalu, Sabah, Malaysia

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Introduction Advancements in technology and cardiovascular management with timely coronary revascularization have improved the survival rate of patients with myocardial infarction. Secondary prevention strategies such as lifestyle