retrieved from the admission book and Hospital Health Information System (HIS).

Results

Within the study period, of 378 patients, 102 (27.0%) of them developed MACE within 1 year with death accounted for 63.7%, followed by heart failure and recurrent MI both 14.7% and stroke,6.9%. Further analysis revealed that older age (OR 1.79,95% CI 1.103,2.886;$p = 0.018$), female (OR 2.20,95% CI 1.159,4.181;$p = 0.016$), have diabetes mellitus (OR 2.18,95% CI 1.373,3.452;$p = 0.001$), and came with moderate (OR 2.83,95% CI 1.299,6.142;$p = 0.009$) as well as severe EF upon admission (OR 12.32,95% CI 3.440,44.086;$p < 0.001$) were more likely to developed MACE within one year. Our result also concordant with the KILLIP score as patient with higher KILLIP score was a higher chance to develop MACE within one year. In multivariate analysis, moderate (AOR 2.732,95% CI 1.242,6.009;$p = 0.012$) and severe EF (AOR 11.49,95% CI 3.144,41.971;$p < 0.001$) upon admission as well as having diabetes mellitus ((AOR 2.22,95% CI 1.242,3.951;$p = 0.007$) remained the independent factors for MACE within one year.

Conclusion

27.0% of our patient developed MACE within one year with death accounted for more than half of them. The factors associated with the event were patient came with moderate and severe EF upon admission, and have underlying diabetes mellitus.

doi:10.1016/j.ijcard.2021.10.084

55.

Review of time in therapeutic range of warfarin in a tertiary centre in Malaysia

K.X. Gan[a], B.K. Chung[a], K.Y. Sim[a], J.E. Tan[a], Z.Y. Lian[a], E.Z. Chan[a], H.S. Ling[b], *[a]Medical Department, Sarawak General Hospital, Sarawak, Malaysia, [b]Faculty of Medicine and Health Sciences, University Malaysia Sarawak (UNIMAS)*

Background

Anticoagulation management is a recognized challenge in medical care. Complications of supratherapeutic anticoagulation are hemorrhagic stroke, major bleeding, and death. There is an even greater risk of ischemic stroke in AF, worsening of VTE associated with subtherapeutic dosing.

Objective

To evaluate the effectiveness of an warfarin anticoagulation for the treatment of atrial fibrillation, VTE, mechanical valve and to identify clinical or biographical data that predict poor international normalized ratio control.

Methods

Retrospective study of cases visited Sarawak General Hospital INR clinic. Cases were analyzed for the INR and Time in therapeutic range (TTR).

Results

A total of 96 patients (mean age 62 years, 47% women) follow up under INR clinic. Two third of our patients were on anticoagulant for atrial fibrillation. The mean TTR was calculated as 54%. Of the 96 patients, 23% were in the good control category (TTR > 70%), 46% were in the intermediate category (50% < TTR < 70%), and 31% were in the poor control category (TTR < 50%). A trend indicating a 1.5 times increase in the odds of inadequate anticoagulation was observed in age 65 and older group. (OR = 1.500; 95% CI, 0.557, 4.039).

Conclusion

The quality of anticoagulant therapy with warfarin in INR clinic showed low TTR. Perhaps need some intervention to improve the TTR or some patient may benefit from NOAC.

doi:10.1016/j.ijcard.2021.10.085

56.

Case series of infective endocarditis with mycotic aneurysm

L.Y. Ting[a], B.K. Chung[b], H.S. Ling[c], *[a]Department of Medicine, Serian Hospital, [b]Sarawak Heart Centre, [c]University Malaysia Sarawak (UNIMAS)*

Background

Infective endocarditis (IE) can cause metastatic infection and develop mycotic aneurysm. We report three cases of IE complicated with mycotic aneurysm.

Case 1

A 22-year old lady presented with high grade fever with chills for one month. She is jaundiced, has finger clubbing, raised jugular venous pressure and a pansystolic murmur. Transthoracic echocardiography (TTE) revealed a 1×1 cm-sized vegetation on the anterior mitral valve leaflet with moderate mitral regurgitation. She developed severe headache on Day 10 of hospitalization and computed tomography of the brain (CTB) revealed a mycotic aneurysm with hemorrhage at the left parietal region. Blood culture grew Haemophillus parainfluenza. She was treated with 6 weeks of antibiotics and subsequently underwent a mitral valve replacement.

Case 2

A 25-year old lady presented with fever with chills for 4 days associated with vomiting, loose stool and lethargy. On examination, she had finger clubbing, Osler nodes and vasculitic rash over her bilateral lower limbs. Her jugular venous pressure was raised without any murmur. TTE revealed 1.3×1 cm-sized vegetation on the anterior mitral valve leaflet with mild mitral regurgitation. On Day 17 of hospitalization, she developed seizure and CTB revealed bilateral middle cerebral artery (MCA) mycotic aneurysm with hemorrhages at the right frontoparietal region with intraventricular extension and hydrocephalus. Blood culture grew *Staphylococcus aureus*. Patient underwent craniotomy, clot evacuation, aneurysm excision and extra-ventricular drain insertion in addition to antibiotics. Unfortunately, she succumbed to death on Day 18 of hospitalization.

Case 3

A 22-year old man presented with fever with chills for 1 month associated with shortness of breath on exertion and knee pain. He had splinter haemorrhages, raised jugular venous pressure and a pansystolic murmur. TTE revealed a 1.7×0.6 cm-sized vegetation on the mitral valve with moderate mitral regurgitation. On Day 15 of hospitalization, patient developed headache and subsequently had reduced conscious level. CTB revealed a right temporoparietal bleed with midline shift. Blood culture grew *Streptococcus oralis*. No surgical intervention was performed. Unfortunately, despite antibiotics, he succumbed to death on Day 20 of hospitalization.

Conclusion

Mycotic aneurysms are rare complications of infective endocarditis. When ruptured, they carry a high-mortality rate.

doi:10.1016/j.ijcard.2021.10.086