SAH to the emergency department at the American University of Beirut Medical Center (AUBMC).

Methods and Results: A cross-sectional retrospective chart review was conducted on all patients with presentation to the Emergency Department (ED) of AUBMC with non-traumatic SAH from September 2009 to September 2016 using hospital discharge diagnosis (ICD-9 code 430). Categorical variables were presented with frequency and percent while continuous variables were presented with mean and median. Within the span of seven years, 94 patients presented to the ED with non-traumatic SAH with a mean age of 55 years and a predominance of female gender (62.8%). Most patients presented with headache (79.8%), most of them complained of a severe headache (77.3%) graded as seven or higher out of a ten-point pain scale. Almost all patients underwent non-contrast computed tomography scan of the brain in the Emergency Department (95.7%), 95.6% of which had a positive finding. Etiology of SAH was mostly due to an aneurysm (66.0%), 75.8% of which were located in the anterior cerebral circulatio n, followed by unknown causes (28.7%). In-hospital complications were found in 21.3% of patients and in-hospital mortality was 6.4%.

Conclusion: Subarachnoid hemorrhage is a resource intensive and critical medical condition which has not previously been described in the Lebanese population. Incidence and outcomes of SAH are comparable to other regions including the MENA region and the United States.

Did the research involve human subjects, including review of existing records/material?: Yes

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☐ CORONARY ARTERY BYPASS GRAFTING URGENCY STATUS IS NOT A PREDICTOR OF MORTALITY

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Body text:

Background: Coronary Artery Bypass Grafting (CABG) is a known major procedure with multiple postoperative complications extending across multiple organ systems. Among the less explored aspects of this surgery is the effect of its urgency status on mortality. We propose that, excluding 30 day postoperative deaths, CABG urgency status is not a predictor of early, intermediate, nor late term mortality.

Methods and Results: Retrospective cohort analysis on 8829 patients undergoing CABG was performed using survival methods. Comparison of Kaplan Meier survival curves over the 20 year follow-up period was performed using the log rank test. To adjust for pre- and intraoperative variables, a Cox proportional hazard model was constructed showing that surgical urgency status (elective, urgent, and emergent) had no statistically significant effect on overall mortality. To address the potential for non-proportionality of hazard ratios a time segmented Cox regression model was used to study the effect of surgical urgency status on early (30 days - 1 year), intermediate (1 year- 5 years) and late (5 years - 20 years) term mortality, excluding mortality within the first 30 postoperative days. The latter revealed no significant effect on early, intermediate, and late term mortality. Excluding intraoperative factors, a sub-analysis adjusting only for preoperative factors, further revealed no statistical significance.

Conclusion: Excluding the first 30 postoperative days, operative status is not a significant predictor for early, intermediate nor late term mortality having adjusted for preoperative and intraoperative factors.

Did the research involve human subjects, including review of existing records/material?: Yes

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☐ DUAL DEFIBRILLATION IN PATIENTS WITH REFRACTORY VENTRICULAR FIBRILLATION: REVIEW AND CASE REPORT

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Body text:

Background: In the setting of a cardiac arrest, refractory ventricular fibrillation (VF) is difficult to manage, and mortality rates are high. Double sequential defibrillation (DSD) has been described in the literature as a successful means to terminate this malignant rhythm, after failure of traditional Advanced Cardiac Life Support (ACLS) measures.

Methods and Results: We present a case of refractory VF in a patient with cardiac arrest who presented to the AUBMC Emergency Department, on whom DSD was successful in reversion to sinus rhythm, and provide a thorough review of similar cases in the literature. We also chose to report on patients' CPC (cerebral performance category) and we aimed at simply describing the differences in patients characteristics, cardiac arrest parameters and outcomes between patients who were discharged with a CPC of ≤ 2 and those who had a CPC of >2 (including patients who died). In this review, the patients who were discharged from the hospital with good neurological outcomes (CPC ≤ 2) had lower mean time to DSD and total resuscitation times than their counterparts.

Conclusion: Refractory ventricular fibrillation in the setting of cardiac arrest is not uncommon. Previous published data and the case report we described show promising results with the use of double sequential defibrillation. As a follow up to this case report and review, and in order to study the versatility of the use of DSD, an upcoming randomized control trial to be done in AUBMC entitled "Double sequence external defibrillation: a randomized