Ischemic stroke in cancer patients

Catarina Valente Bexiga¹, Vilma Laís Grilo², Ana Raquel Miranda², Melanie Duarte Serra Ferreira², Ana Glória Fonseca², and Maria Francisca Delerue²

From the Lisbon Stroke Summit, Lisbon, Portugal. 7–8 April 2017.

Abstract

Background: The association between venous thromboembolism and malignancy is well known. How arterial events and cancer are related is less clear.

Objectives: To evaluate cardiovascular risk factor (CVRF) profile in cancer patients admitted for ischemic stroke (IS), as well as stroke etiology.

Methods: A hospital-based retrospective study consisting in the analysis of admissions between January 2013 and December 2016 was conducted. Clinical files whose final diagnoses included ICD-9 codes pertaining IS and any solid neoplasia were reviewed. Variables included underlying malignancy, CVRF profile and IS etiology. For statistical analysis, we used IBM SPSS version 23. The significance level was 0.05.

Results: We identified 109 patients, with 58.7% men and an average of 75.5 years. Gastrointestinal tract cancer was the most common (22.9%) neoplasia, and most tumors were adenocarcinomas (59.6%). At admission, 55 of the patients had active malignancy. The most frequent CVRF was hypertension (80%). One-third of the patients had atrial fibrillation, which was associated with non-adenocarcinoma histology ($\chi^2$, p=0.001). Most patients had already known malignancy. In 8 of them, cancer was diagnosed during hospital admission. TOAST etiology was “undetermined” in half of IS and undetermined etiology was associated with adenocarcinoma histology ($\chi^2$, p<0.001).

Conclusion: In this study, age, hypertension and atrial fibrillation were the most relevant CVRF for IS as a first arterial thromboembolic event in patients with solid neoplasia. An important percentage of IS had “undetermined” etiology, especially in patients with adenocarcinoma, thus indicating that there is still much to unveil in the association between IS and cancer.