PRELIMINARY ANALYSIS OF THE BELGIAN MULTICENTRIC COHORT OF PATIENTS WITH FIBROMUSCULAR DYSPLASIA (BEL-FMD)

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Objective: Fibromuscular dysplasia (FMD) has been defined as an idiopathic, segmental, non-atherosclerotic and non-inflammatory disease of the musculature of arterial walls. It may affect renal, cervico-cephalic and, less often, visceral, limb or coronary arterial beds. Up to now, most data on the presentation of the disease were derived from the French, United States and, more recently, European registries. We report here the main characteristics and clinical presentation of patients with FMD from Belgium.

Design and method: We analysed the main characteristics of 151 patients enrolled in 7 Belgian Academic centres from November 2015 to January 2018.

Results: Patients were predominantly women (88%) and Caucasians (95%). Age at diagnosis was 49.0 ± 13.7 years, 90% of patients were hypertensive, 85% had multifocal FMD and 31% multivessel FMD. Family history of FMD was reported in 4% of cases. Compared to patients with multifocal FMD, patients with focal FMD were younger (36.4 ± 9.8 vs. 51.2 ± 13.1 years, p = 0.004) and had less often multivessel FMD (5% vs. 35%, p = 0.002). Compared to patients with single-vessel FMD, patients with multivessel FMD were more frequently of the multifocal subtype (98% vs. 80%, p = 0.009). Compared with prevalent patients, incident patients, i.e. patients diagnosed after December 2015 were characterized by a significantly higher age at diagnosis (52.1 ± 9.7 vs. 47.2 ± 15.4 years, p = 0.02), lower systolic blood pressure (132.2 ± 17.6 vs. 140.2 ± 22.8 mmHg, p = 0.02) and higher eGFR (94.6 ± 33.2 vs. 80.3 ± 33.3 mL/min, p = 0.01). Finally, revascularisation interventions tended to be less frequent in incident patients (55% vs. 39%, p = 0.07).

Conclusions: The main characteristics of patients with FMD in Belgium are in line with the overall results of the European/International FMD registry. Furthermore, our findings confirm previously reported differences between focal and multifocal FMD, as well as between single vessel and multivessel FMD. The differences between prevalent and incident cases likely reflect increased physician awareness over time, leading to inclusion of less symptomatic forms of FMD in older patients.