

29th International Congress on

Prevention of Diabetes and Complications

September 27-28, 2018 | Berlin, Germany

Therapeutic education of the pilot at high cardiovascular risk

Hanène DJEMAIEL, Ayed A, Souissi A, El Hani I, Ben Dhia I and Guermazi N
Center of Aerospace Medicine Expertise, Tunisia

Introduction: Prevention of cardiovascular disease remain one of the major concerns of aerospace medicine. Considerable progress has been made in the detection and treatment of risk factors. However, the screening of pilots with a high cardiovascular risk profile as well as their therapeutic education remains the best way to ensure effective prevention. The aim of this study is to evaluate the level of pilot adhesion to different preventive measures especially in view of new international recommendations of management of the high cardiovascular risk.

Methods: This is a retrospective study of 140 pilots, all male, who passed through the Functional Explorations Department of the Aerospace Medicine Expertise Center for a five-year period from 2013 to 2017. We have first identified pilots with high cardiovascular risk profile and who are 23 (16.4%).

Then we divided them into 4 sub-groups: coronary, type 2 diabetics, pilots with high multifactorial risk and pilots with intermediate risk but with additional risk factors.

Finally, we identified therapeutic and preventive targets for the different modifiable risk factors.

Results: The average age of our pilots was 53 years [43-59]. The distribution of the different risk factors was as follows: 8 hypertension, 6 diabetes, 23 dyslipidemia, 13 smoking, 11 metabolic syndromes, 20 overweight and obesity and 23 inactivities.

As for the subgroups, the distribution was as follows: 6 coronary patients including 3 diabetics (26%), 6 diabetics (DT2) (26%), 3 pilots with high multifactorial risk (13%) and 11 pilots with intermediate risk (48%). For our hypertensive, diabetic or dyslipidemic pilots, we have recorded rates of the therapeutic targets achievement of 88, 67 and 17%, respectively. No targets were achieved for smoking, weight and metabolic syndrome. As for physical activities, only 4 pilots were trained in accordance with the recommendations.

Conclusion: These results suggest that the management of the pilot at high cardiovascular risk is still insufficient and below objectives. The expert doctor should give more interest to the therapeutic education of these pilots in order to reduce cardiovascular morbidity and to ensure flying safety.