Hazardous Oral Hypoglycemic Agent (OHA) Use Among Pilots: A Diabetic Royal Bahrain Airforce Fighter Pilot Developing Hypoglycemia During Flight

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ABSTRACT

Here we report the case of a fighter pilot experiencing hypoglycemia during a flight mission due to oral hypoglycemic agent (OHA) treatment. This ended with the pilot losing consciousness. Pilot incapacitation due to any medical illness may affect flight safety and cause serious aircraft accidents. Hypoglycemia is a side effect of OHAs, which are typically used to maintain normal blood sugar levels. Although the hypoglycemic effects of OHAs are well known and treatable, if immediate action is taken, disaster aircraft crashes involving high-speed aircraft can occur due to loss of the pilot's consciousness and aircraft control. Hypoglycemia is considered a relatively rare medical illness that can lead to pilot incapacitation (relative to more common medical illnesses, such as cardiovascular or neurological disorders). Dropping blood sugar to a level that may affect the pilot's consciousness can lead to loss of aircraft control. Therefore, the goal of an aeromedical certificate and close follow-up of diabetic pilots is to reduce the risk of (or identify early) possible complications from disease or disease treatments that may contribute to fatal aircraft accidents. Here we report the effect of OHA on fighter aviators and the aeromedical concerns that should be addressed in treating diabetic fighter pilots to reduce the risk of medical illness that may lead to flight accidents.

Keywords: Consciousness, Hypoglycemia, Metformin, Pilot, Flight accident

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