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## **CORONARY ARTERY DISEASE IN AIRCREW – WHAT TO DO NEXT?**

*LA MALADIE CORONARIENNE EN ÉQUIPAGE AÉRIEN - QUE FAIRE ENSUITE?*

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**Introduction:** Coronary Artery Disease (CAD) is the leading cause of death in both men and women in most industrialized nations. Its modes of presentation (sudden cardiac death, myocardial infarction (MI), unstable and stable angina, and ischemic arrhythmias) are of paramount concern in aircrew because of possible sudden incapacitation or performance decrement. A careful examination of known CAD in United States Air Force (USAF) aviators was done to determine prevalence, risk factors, and presenting symptoms as well as long term outcomes. Using this data, as well as published data, the 8 nation member NATO aviation cardiology working group recently developed a consensus document that will be reviewed.

**Methods:** All aviators with CAD are followed by the USAF Aerospace Consultation Service, home to the Clinical Sciences Database which contains over 1.2 million cardiac studies on over 283,000 aviators. In this database, 172 unique aviators had CAD to include 33 with myocardial infarctions and 76 revascularizations. Current policy regarding disposition of USAF aircrew with coronary artery disease including revascularization and the recently written NATO working group consensus document was analyzed.

**Results:** Annual cardiac event rates in apparently healthy military aviators are approximately 0.15% per year for males aged 35-54 years. In those requiring revascularization, the most common presenting symptoms were myocardial infarction (34%), chest pain (30%) and abnormal screening tests (13%). Long term follow up in those with revascularization demonstrated a 14% rate of repeat revascularization with no MI or cardiac death at 10 years.

**Discussion:** All aircrew and especially military aviators are likely at low risk of CAD. Aircrew with revascularization have very low risk of recurrent MI and death and a relatively low repeat revascularization rate with close follow-up. Using this new data as well as published data a consensus document on coronary artery disease has been developed and when published should be the world's guide for aeromedical coronary artery disease disposition.