Revised: 21 AUG 2007

VENOUS THROMBOSIS (ICD9 453.8 / 415.1)

AR 40-501: 4-5d(2) NOTE: Moving to Hematology Section in next set of revision

AEROMEDICAL CONCERNS: The pain and swelling from deep venous thrombosis (DVT) is incompatible with flight duties, potentially resulting in distraction and incapacitation from pain and discomfort locally to pulmonary embolism with chest pain, shortness of breath, hypoxia or cardiac dysrhythmias. Dyspnea occurs in nearly 90% of patients with symptomatic pulmonary emboli. Cramped cockpit conditions may exacerbate or provoke a thrombotic event.

WAIVERS (All Rated and Non-Rated Aircrew to include ALL Applicants): Waiver will be considered on a case-by-case basis for acute, nonrecurrent conditions after cessation of anticoagulant therapy provided a normal workup with no predisposing factors, such as malignancy or disorders of clotting. The development of pulmonary hypertension, the requirement for continued anticoagulation, or surgical procedures, such as plication of the vena cava, is disqualifying with waiver considered on a case-by-case basis. Superficial thrombophlebitis does not require a waiver and will be filed as *Information Only*.

INFORMATION REQUIRED:

- ❑ Hematology consultation including coagulation studies
- ❑ Normal exercise tolerance (APFT) after recovery
- ❑ Pulmonary function testing with history of pulmonary embolism.
- ❑ Exclusion of underlying malignancy with history of pulmonary embolism.
- ❑ If MEB completed, results/recommendations shall be forwarded.

FOLLOW-UP: With a completely normal evaluation after acute, nonrecurrent event, annual evaluation with Internal Medicine or Hematology for 3 years is required. If complicated with pulmonary embolism or recurrence, annual consultation is for duration of flight status. Recurrence of thrombotic event will require resubmission for waiver with full work-up.

TREATMENT: Medication therapy, beyond aspirin, is considered incompatible with continued flying duties.

DISCUSSION: Prevalence of venous thrombosis history ranges from 2 to 5% of the population. Risk factors related to hypercoagulability (e.g., the risk of developing DVT after open prostatectomy has been quoted as 35%) and stasis (e.g., being strapped into an aircraft seat for long missions) should be considered. In 50% of cases of deep vein thrombosis (DVT) of the leg, there are no signs or symptoms relating to the lower limbs. Untreated, acute ileofemoral venous thrombosis has a 50% chance of causing pulmonary embolus. Malignancy is found in up to 30% of such patients. It is estimated that only 20-30% of pulmonary emboli cause concerning symptoms. The vast majority of patients who survive pulmonary embolism will recover normal or nearly normal cardiac and pulmonary functions within 2-8 weeks.