New DVT guidelines: No evidence to support 'economy class syndrome'
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New evidence-based guidelines from the American College of Chest Physicians (ACCP) address the many risk factors for developing a deep vein thrombosis (DVT), or blood clot, as the result of long-distance travel. These risk factors include the use of oral contraceptives, sitting in a window seat, advanced age, and pregnancy. The Antithrombotic Therapy and Prevention of Thrombosis, 9th ed: American College of Chest Physicians Evidence-Based Clinical Practice Guidelines, published in the February issue of the journal CHEST, also suggest there is no definitive evidence to support that traveling in economy class can lead to the development of a DVT, therefore, dispelling the myth of the so-called "economy class syndrome."

"Traveling in economy class does not increase your risk for developing a blood clot, even during long-distance travel; however, remaining immobile for long periods of time will," said guideline co-author Mark Crowther, MD, Department of Medicine, McMaster University, Hamilton, Ontario, Canada. "Long-distance travelers sitting in a window seat tend to have limited mobility, which increases their risk for DVT. This risk increases as other factors are present." DVT is a serious condition that can lead to a potentially fatal blockage in the lung known as a pulmonary embolism (PE).

DVT/PE RISK FACTORS FOR LONG-DISTANCE TRAVEL

Although developing a DVT/PE as the result of long-distance travel is unlikely in most cases, the guidelines note that for long-distance flights, the following factors may increase your risk of developing a DVT/PE and related complications:

- Advanced age
- Estrogen use, including oral contraceptives
- Pregnancy
- Sitting in a window seat
- Obesity

Conversely, the guidelines suggest there is no definitive evidence to support that dehydration, alcohol intake, or sitting in economy class (compared with sitting in business class) increases your risk for developing a DVT/PE resulting from long-distance flights.

RECOMMENDATIONS FOR DVT/PE PREVENTION IN LONG-DISTANCE TRAVELERS

For travelers on flights of 6 hours or more who have an increased risk for DVT/PE, the ACCP recommends frequent ambulation, calf muscle stretching, sitting in an aisle seat if possible, or the use of below-knee graduated compression stockings (GCS). For long-distance travelers who are not at increased risk for DVT/PE, the guidelines suggest against the use of GCS. In addition, the guidelines suggest against the use of aspirin or anticoagulant therapy to prevent DVT/PE in long-distance travelers. For travelers who are considered to be at particularly high risk for DVT/PE, the use of antithrombotic agents should be considered on an individual basis because the adverse effects may outweigh the benefits.

"Symptomatic DVT/PE is rare in passengers who have returned from long flights; however the association between air travel and DVT/PE is strongest for flights longer than 8 to 10 hours," said Dr. Crowther. "Most passengers who do develop a DVT/PE after long-distance travel have one or more risk factors."

PATIENT-FOCUSED ANTITHROMBOTIC GUIDELINES

In addition to long-distance travel, the ACCP
guidelines include more than 600 recommendations for the prevention, diagnosis, and treatment of thrombosis, addressing a comprehensive list of clinical conditions. These clinical conditions include medical, surgery, orthopedic surgery, atrial fibrillation, stroke, cardiovascular disease, pregnancy, and neonates and children, among others. Key advances in this edition of the guidelines include a stronger focus on risk stratification of patients, which suggests clinicians should consider a patient's risk for DVT/PE before administering or prescribing a prevention therapy.

"There has been a significant push in health care to administer DVT prevention for every patient, regardless of risk. As a result, many patients are receiving unnecessary therapies that provide little benefit and could have adverse effects," said Guidelines Panel Chair Gordon Guyatt, MD, FCCP. "The decision to administer DVT prevention therapy should be based on the patients' risk and the benefits of prevention or treatment." The new guidelines also take a more patient-focused approach by considering patient values and preferences regarding antithrombotic therapy and prevention.

The guidelines are endorsed by the following medical associations: the American Association for Clinical Chemistry, American College of Clinical Pharmacy, American Society of Health-System Pharmacists, American Society of Hematology, International Society of Thrombosis and Hemostasis, and the American College of Obstetrics and Gynecology (pregnancy article only).

More information: For more information about the guidelines and accompanying clinician resources, visit www.chestnet.org and follow #AT9 on Twitter. Patient resources related to the guidelines are available through OneBreath, an initiative of The CHEST Foundation, the philanthropic arm of the ACCP.