The OMS Role in Preventing Venous Thromboembolism (VTE)
Roger Spampata, DMD, Former OMSNIC Risk Management Committee Member

With the increasing volume of surgery performed on an outpatient basis and in ambulatory surgery centers (ASC), professional associations and regulatory bodies have begun to address preventative strategies against venous thromboembolism (VTE) that impact the outpatient population. Given the number of OMS cases that are performed on an outpatient basis in an ASC, this should raise some interest in the OMS community.

Current estimates indicate that each year in the U.S. as many as 900,000 people could be affected by VTE (1 to 2 per 1,000), and that 60,000-100,000 people die from VTE. Furthermore, one-third of people with either deep venous thrombosis (DVT) or pulmonary embolism (PE) will suffer from a recurrence within 10 years. It is suggested that approximately 5 to 8% of the U.S. population has one of several genetic risk factors (inherited thrombophilia) that increase the risk for thrombosis.

The incidence of VTE in oral and maxillofacial surgery is low. However, many OMS procedures last more than 45 minutes and thus are categorized as major surgery with an increased risk for VTE. The use of a preoperative risk assessment is a key component of patient safety and risk management. To that end, the Accreditation Association for Ambulatory Health Care (AAAHC) Institute for Quality Improvement has developed a “Patient Safety Toolkit: Ambulatory Surgery and VTE (Venous Thromboembolism)”. This guide incorporates the Caprini Thrombosis Risk Factor Assessment Tool and cites the risks of VTE for various types of ambulatory surgery as follows:

- body contouring (9.3%)
- abdominoplasty (2%)
- ENT surgery (1.3%)
- spine surgery (1.15%)
- high volume liposuction (1.1%)
- face lifts (0.49%)
- knee arthroscopy (0.42%)

It is recommended that we as OMS familiarize ourselves with the Caprini VTE Score. A Caprini score >8 suggests the increased risk of VTE is 18.3% for all ambulatory surgery. In addition, we can develop VTE risk assessment and prevention protocols for our own practices. Prevention strategies against VTE can include: flexion of the patient’s knees, the use of elastic stockings or intermittent pneumatic compression devices, discontinuing supplemental hormones one week preoperatively, early ambulation, and the use of low molecular weight heparin (LMWH) during the perioperative period. Interestingly, the use of intravenous sedation, which is common in oral and maxillofacial surgery, has been shown to decrease the risk of VTE during longer operations (>45 minutes).

Attention to VTE prevention is an additional aspect of care and patient safety measures that we as OMS need to incorporate into our contemporary practice.

References: