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Tegaderm™ Trauma in the Operating Room

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A 49-YR-OLD female nonsmoker developed shortness of breath, cough, and dyspnea on exertion after partial thyroidectomy. Computed tomography of the chest revealed emphysematous changes, bronchiectasis, and increasing pulmonary infiltrates with lymphadenopathy. In addition, she was noted to have abnormal skin laxity with pendulous folds of her chin and eyes. An endobronchial biopsy was scheduled. After induction of anesthesia, her eyes were protected with Tegaderm™ Transparent Dressing (3M, St. Paul, MN). On emergence, the Tegaderm™ dressing was removed with shearing of the underlying skin and active bleeding (see fig.). Skin was also abraded at the site of the electrocardiography leads (inset). Dermatology consultation led to the diagnosis of acquired cutis laxa (ACL).

ACL is characterized by abnormal elastic fibers resulting in loose, redundant, hypoelastic skin. It has an insidious onset, most commonly in adulthood, and may be associated with a variety of malignancies, infections, inflammatory and connective tissue diseases, and drugs.² Systemic involvement includes pulmonary, cardiovascular, gastrointestinal, and skeletal systems. The most serious complication is cor pulmonale

resulting from progressive pulmonary emphysema. There is no definitive treatment for ACL. Preserving skin integrity is one of the challenges in caring for patients with ACL or similar skin conditions. Use of lubricant eye ointment to protect the eyes against corneal abrasion, nonadhesive head dressings, and clip-on pulse oximeter has been suggested in analogous fragile skin disorders.³ In addition to the importance of positioning, padding, and skin integrity, an understanding of the systemic manifestations associated with skin diseases such as ACL is crucial for the anesthesiologist, as they can be life threatening.

References

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