

# GOLD NUGGETS

GLOBAL INITIATIVE FOR CHRONIC  
OBSTRUCTIVE  
LUNG  
DISEASE

## ADVANCED EHEALTH FOR COPD

SPONSORED BY THE CANCER, CARDIOVASCULAR DISEASE  
AND PULMONARY DISEASE PROGRAM AT COLORADO  
DEPARTMENT OF PUBLIC HEALTH AND ENVIRONMENT AND  
THE UNIVERSITY OF COLORADO HOSPITAL

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University of Colorado Hospital, COPD eHealth

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**Enrollment Deadline - August, 2007**

**1**

**Month Remaining!**

**VISIT OUR WEBSITE**

[www.copdehealth.org](http://www.copdehealth.org)

**REFER YOUR COPD  
PATIENTS TO  
COPD EHEALTH**

**DON'T FORGET....**with outdoor  
temperatures rising remind patients  
to increase their fluid intake.



## SPECIAL CONSIDERATIONS FOR PATIENTS WITH COPD UNDERGOING SURGERY

Postoperative pulmonary complications are as important and common as postoperative cardiac complications and are therefore a key component of increased risk of surgery in COPD patients. The potential contributing risk factors include smoking, poor general health status, age, obesity, and COPD severity. A comprehensive definition of postoperative complications should include major pulmonary complications, namely lung infections, atelectasis and/or increased airflow obstruction, all potentially resulting in acute respiratory failure and aggravation of underlying COPD.

The surgical site is the most important predictor, and the risk increases as the incision approaches the diaphragm. Upper abdominal and thoracic surgery represents the greatest risk. Most reports conclude that epidural or spinal anesthesia have a lower risk than general anesthesia.

Several studies in high risk COPD patients suggest that there is a threshold beyond which the risk of surgery is prohibitive. Surgery should be postponed if an exacerbation is present. Surgery needs to be differentiated from that aimed to improve function and symptoms for COPD. This includes bullectomy, LVRS and lung transplantation.

## **SURGICAL OPTIONS ARE THEY RIGHT FOR YOUR PATIENT?**

### **COPD SURGICAL TREATMENT**

**Bullectomy:** Effective in reducing dyspnea and improving lung function in carefully selected patients. A thoracic CT scan, ABG, and comprehensive respiratory function tests are essential before deciding if this is appropriate for your patient.

**Lung Volume Reduction Surgery (LVRS):** Surgical procedure that removes parts of the lung which are hyperinflated. Results from studies indicate that LVRS in selected patients can improve exercise tolerance and quality of life. Patients with upper-lobe emphysema and low exercise capacity have also been shown to have a greater survival rate compared to standard medical therapy. Who can get LVRS?

- Use less than 6 liters of oxygen
- No major medical problems
- Willing to undergo extensive evaluation
- Willing to undergo intensive pulmonary rehabilitation

Hospital costs associated with LVRS are high and it is currently only performed in carefully selected patients; not recommended for widespread use.

**Lung Transplantation:** Has been shown to improve quality of life and functional capacity. Who can get lung transplantation?

- Less than one quarter of normal lung function by FEV<sub>1</sub>
- Less than 60 years old
- No major medical problems
- Motivation!



**NEXT MONTH...  
COPD Program Update**

The recommendations in this newsletter were obtained from "Global Strategy for the Diagnosis, Management and Prevention of Chronic Obstructive Pulmonary Disease" updated version 2006. In this issue we have also used material from: Naunheim KS, Wood DE, Mohsenifar Z, Sternberg AL, Criner GJ, DeCamp MM, et al. [Long-term follow-up of patients receiving lung-volume-reduction surgery versus medical therapy for severe emphysema by the National Emphysema Treatment Trial Research Group.](#)

GOLD website: [www.goldcopd.com](http://www.goldcopd.com).