

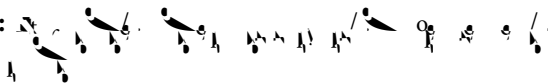


Airway Bacterial Colonization with Lung Cancer Requiring Chemotherapy

Department of Thoracic Surgery and Tumors, Oncology Centre of Bydgoszcz, Bydgoszcz, Poland

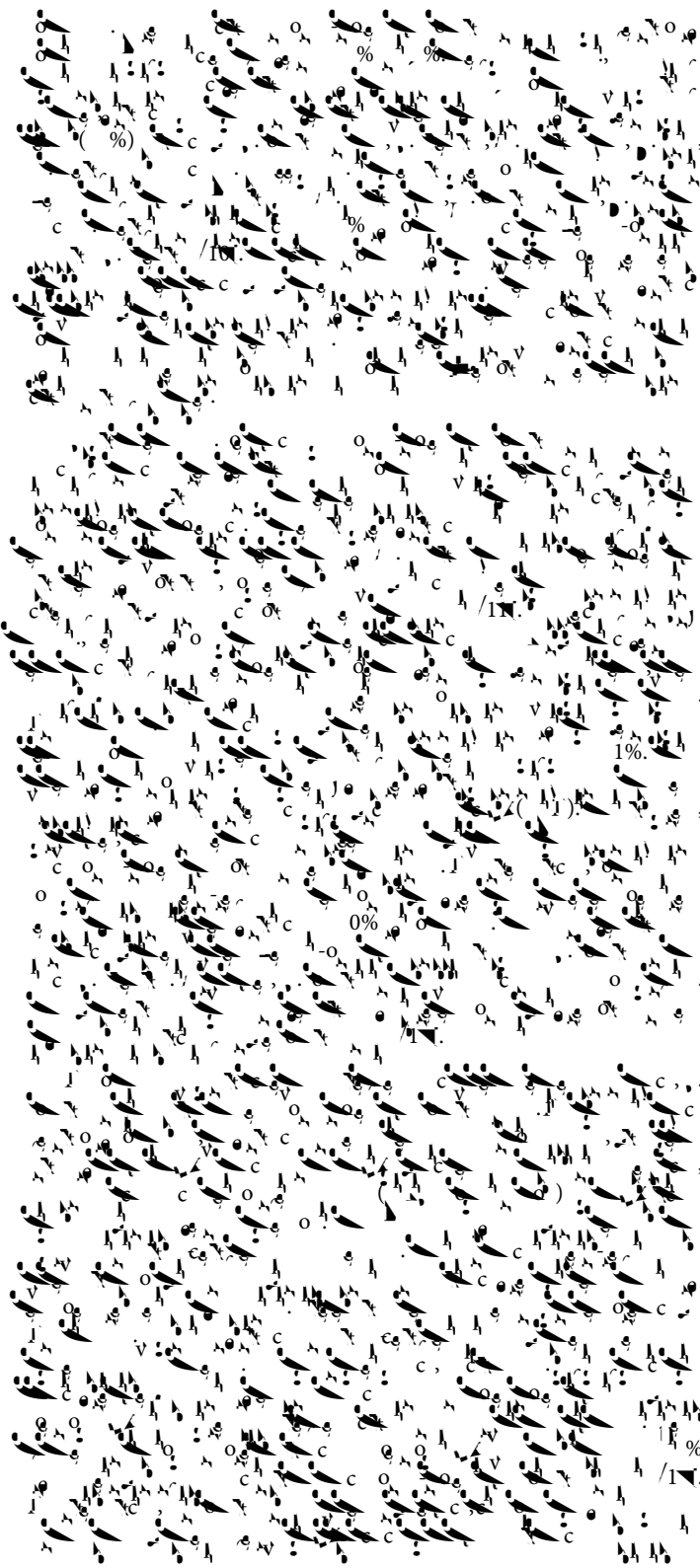
Bronchial colonization is frequently reported in patients with lung cancer, and has a potential impact on therapeutic management and prognosis. We aimed to prospectively define the prevalence and nature of bronchial colonisation in patients at the time of diagnosing lung cancer. 210 consecutive patients with lung cancer underwent a flexible bronchoscopy for lung cancer. The type and frequency of bacterial, mycobacterial and fungal colonisation were analysed and correlated with the patients' and tumours' characteristics.

Potential pathogens were found in 48.1% of samples: mainly the Gram-negative bacilli *Escherichia coli* (8.1%), *Haemophilus influenzae* (4.3%) and *Enterobacter* spp. (2.4%); Gram-positive cocci, *Staphylococcus* spp. (12.9%) and *Streptococcus pneumoniae* (3.3%); atypical mycobacteria (2.9%); *Candida albicans* (42.9%); and *Aspergillus fumigatus* (6.2%). Aged patients ($p=0.02$) with chronic obstructive pulmonary disease ($p=0.008$) were significantly more frequently colonised; however, tumour stage, atelectasis, bronchial stenosis and abnormalities of chest radiography were not associated with a higher rate of colonisation. Squamous cell carcinoma tended to be more frequently colonised than other histological subtypes. Airway colonisation was reported in almost half of patients presenting with lung cancer, mainly in fragile patients, and was significantly associated with worse survival ($p=0.005$). Analysing colonisation status of patients at the time of diagnosis may help improve the management of lung cancer.

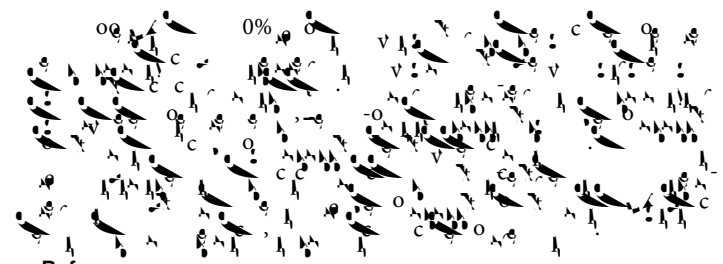
Keywords: 

Introduction





Conclusions



References

1. Klustersky J, Aoun M (2004) Opportunistic infections in patients with cancer. *Ann Oncol* 15: 329–335.
2. Klustersky J (1998) Les complications infectious du cancer bronchique. *Rev Mal Respir* 15: 451–459.
3. Duque JL, Ramos G, Castrodeza J (1997) Early complications in surgical treatment of lung cancer: a prospective multicenter study. *Ann Thorac Surg* 63: 944–950.
4. Kearny DJ, Lee TH, Reilly JJ (1994) Assessment of operative risk in patients undergoing lung resection. *Chest* 105: 753–758.
5. Busch E, Verazin G, Antkowiak JG (1994) Pulmonary complications in patients undergoing thoracotomy for lung carcinoma. *Chest* 105: 760–766.
6. Deslauriers J, Ginsberg RJ, Piantadosi S (1994) Prospective assessment of 30-day operative morbidity for surgical resections in lung cancer. *Chest* 106: 329–334.
7. Belda J, Cavalcanti M, Ferrer M (2000) Bronchial colonization and postoperative respiratory infections in patients undergoing lung cancer surgery. *Chest* 118:1571–1579.
- 8.