LETTERS

Multi-professional lung cancer disclosure to change anxiety and depression: an exploratory study

The physician's communication style when disclosing bad news about cancer can reportedly affect the patient's psychological adjustment.^{1,2} Little is known about changes in anxiety and depression during the initial period of lung cancer diagnosis disclosure. The primary goal of this study was to analyse the impact of a multi-professional interview for diagnosis disclosure (MIDD) on anxiety and depression in patients with newly diagnosed non-small cell lung cancer (NSCLC).

Data were obtained from a prospective study in ambulatory adults with histologically confirmed NSCLC. Depression and anxiety were assessed by the Hospitalised Anxiety and Depression Scale (HADS) twice: at admission (time 1), when the diagnosis was unknown, and after diagnosis disclosure (time 2). Median time between times 1 and 2 was 13 days. During this period, the mean length of hospitalisation was 3 days. The HADS is a 14 item scale measuring anxiety and depression.³ Each subscale is scored from 0 to 21, with higher scores indicating greater distress. French validation of this tool has been conducted by Razavi and colleagues.⁴

The MIDD was structured in two steps:

1. Medical interview: the physician disclosed the diagnosis and the proposed treatment course according to medical guidelines about breaking bad news.⁵ During this interview, the referent nurse observed the patient's and physician's reactions, collected data to identify themes for determining a nurse-led intervention adapted to the patient's needs and expectations (supportive communication).
2. Referent nurse interview without the physician: she asked the patient if he/she understood the information given by the physician and reformulated the physician's key words. The nurse then explained the details of the treatment procedures, checked how much more information the patient wished to know and responded to his/her reactions and questions.

Sixty-five patients were recruited. Twenty-four patients were excluded for the following reasons: histological diagnosis ($n = 14$), cerebral metastasis diagnosed between times 1 and 2 ($n = 1$), disclosure of lung cancer diagnosis outside of MIDD ($n = 6$) and refusal to answer at time 2 ($n = 3$). A subset of 41 patients was available for analysis: subjects were 33 men and eight women, aged 29–85 years (mean 61), performance status (PS) 0–1. There was no significant difference in distribution of

gender and PS between included and excluded subjects but a significant difference in marital status (patients living alone more often in excluded subjects).

Before diagnosis, the overall prevalence rates of anxiety and depression were 51% and 19.5%, respectively. After MIDD, the prevalence rates were 44% and 27%, respectively. Mean anxiety score decreased over time ($p < 0.01$) although depression remained stable.

The reduction in anxiety after MIDD could be due to the fact that patients often experience anticipatory anxiety before their consultation with a physician and that, after the consultation, their anxiety generally decreases. Alternatively, there is the issue of the adequacy of the information provided by physicians. In our study, effective reformulation by the nurse of the information provided by the physician probably impacted favourably on the reduction in anxiety.

Thus in the absence of a control group, we could not conclude a real benefit of MIDD although it might be plausible. This is the first time the impact of MIDD on psychological and QOL measures has been evaluated in France.

Acknowledgement: The authors thank the participants, staff (especially Mireille Josse, Martine de-Lignerolles and Sylviane Dupouts) for their cooperation with the study and Ray Cooke for assistance with the manuscript.

F Cousson-Gélie, J-M Vernejoux, H Bazex-Chanteloube, C Raherison, A Ozier, P-O Girodet, A Tayard

Hôpital du Haut-Lévêque, Avenue Magellan PESSAC, France

Correspondence to: Dr J-M Vernejoux, Hôpital du Haut-Lévêque, Avenue Magellan PESSAC 33604, France; jean-marc.vernejoux@chu-bordeaux.fr

Funding: This research was supported by a grant from the Ligue Nationale de Lutte contre le Cancer and the Fédération Hospitalière de France.

Competing interests: None.

Ethics approval: Ethics approval was obtained.

Thorax 2008;63:658. doi:10.1136/thx.2007.093922

REFERENCES

1. Takayama T, Yamazaki Y, Katsumata N. Relationship between outpatients' perceptions of physicians' communication styles and patients' anxiety levels in a Japanese oncology setting. *Soc Sci Med* 2001;53:1335–50.
2. Mager WM, Andrykowski MA. Communication in the cancer "bad news" consultation: Patient perception and psychological adjustment. *Psychooncology* 2002;11:35–46.
3. Zigmond AS, Snaith RP. The Hospital Anxiety and Depression scale. *Acta Psychiatrica Scand* 1983;67:361–70.
4. Razavi D, Delvaux N, Farvacques C, et al. Validation de la version française du HADS dans une population de patients cancéreux hospitalisés. *Rev Psychol Appliquée* 1989;39:295–308.
5. Girgis A, Sanson-Fisher RW. Breaching bad news: Consensus for medical practitioners. *J Clin Oncol* 1995;13:2449–56.

The role of rhinoviruses and enteroviruses in community acquired pneumonia in adults

The article by Jennings and colleagues¹ described interesting findings regarding the common nature of mixed viral/bacterial aetiology in patients with community acquired pneumonia (CAP) and the association between mixed rhinovirus/pneumococcal infection and severe disease. We have also examined the role of respiratory picornaviruses as causative agents of CAP in adults and their contribution to disease severity. As part of a larger prospective clinical study² of the aetiology of CAP, the occurrence of rhinoviruses and enteroviruses was analysed in 231 patients. Detailed information on the study design has been reported previously.² In addition, throat swab specimens were examined for the presence of rhinoviruses and enteroviruses using previously described reverse transcriptase (RT)-PCR assays.³

The characteristics of the patients and microbiological findings are described in table 1. Viruses were detected in 46 (20%) patients, of whom 19 (41%) were positive for respiratory picornaviruses by RT-PCR. Among the 12 patients with enteroviruses, additional aetiological agents were identified in seven (58%), including three (25%) *Streptococcus pneumoniae*. Among the seven patients with rhinoviruses, a concomitant *S pneumoniae* infection was detected in four (57%).

It has been shown in an experimental model that adherence of *S pneumoniae* to human tracheal epithelial cells is increased in the presence of rhinovirus.⁴ The results of Jennings and colleagues¹ prove this association in vivo by showing that 39% of their patients with rhinovirus identified from a nasopharyngeal sample had concurrent *S pneumoniae* infection. Consistently, as many as 57% of our patients with rhinovirus also had *S pneumoniae* infection. Rhinovirus was associated with severe disease (Pneumonia Severity Index IV-V) in 29% of cases, the percentage being somewhat lower than the 39% of severe rhinovirus associated infections reported by Jennings and colleagues.¹ One of our patients with mixed rhinovirus/pneumococcal infection died.

To date, only limited data exist on the role of enteroviruses in lower respiratory tract infections in non-immunocompromised adults. To our knowledge, only one previous study included the enterovirus PCR test in the diagnostic array of CAP.⁵ Moreover, only one (0.5%) of the 198 patients in that study had enterovirus infection. Here, enterovirus was the second most common viral agent after influenza A virus, being detected in 5% of our patients. This percentage is similar to that observed in association with lower respiratory tract infection in children⁶ in whom enteroviruses are among the most