Clubbing of the Fingers in Patients with Primary Lung Cancer

Sir.

Digital clubbing, characterised by the painless uniform swelling of the soft tissues of the terminal phalanx, is a paraneoplastic manifestation which occurs in about one quarter of patients with carcinoma of the lung^{1,2,3}. In a series reported by Rassam et al2, finger clubbing was present in 29% of patients with lung cancer and it was most commonly associated with squamous cell carcinoma. In a prospective study of patients with primary lung cancer diagnosed at the University Hospital, Kuala Lumpur from October 1991 to April 1996, finger clubbing was observed in 57 (19%) of 300 consecutive cases at presentation. This proportion was lower than that reported in the West^{2,3}. The mean age of patients with lung cancer was 60.4 years (range 21-90 years). There were 215 males and 85 females (male to female ratio = 2.53 : 1). A positive smoking history was elicited from 240 (80%) patients. The ethnic distribution of the patients was Chinese 71.7%, Malay 18.3%, Indian 8.7% and others 1.3%. The diagnosis of lung cancer was confirmed by either histological or cytological examination

bronchopulmonary specimens, pleural biopsy or effusion specimens, and lymph node biopsy or aspiration. Lung cancer was confirmed by histology in 247 (82.3%) patients and only by cytology in 53 (17.7%) patients. The distribution of cell types and patients with finger clubbing at presentation is shown in Table I.

When cases of unclassified carcinoma were excluded, finger clubbing was most commonly associated with squamous cell carcinoma; patients with cancer of this cell type accounted for 56.3% (27 of 48) of lung cancer patients with finger clubbing. A higher percentage (29%) of patients with squamous cell carcinoma had finger clubbing than those with the other major cell types. This is consistent with the finding by others2. The frequency of finger clubbing was not affected by the patients' sex or ethnic group. Compared to an incidence of 3.9% for hypertrophic osteoarthropathy reported in another series2, only two (0.7%) patients in this study, one with squamous cell carcinoma and the other, adenocarcinoma had hypertrophic osteoarthropathy which accompanied their finger clubbing.

C K Liam, MRCP, Department of Medicine, Faculty of Medicine, University of Malaya, 50603 Kuala Lumpur

Table I
Distribution of lung cancer cell types and patients with finger clubbing

Lung cancer cell type	Patients		Proportion of	
	Number	(%)	patients with	
			Clubbing	(%)
Adenocarcinoma	126	(42)	15/126	(11.9)
Squamous cell carcinoma	93	(31)	27/93	` (29)
Small-cell carcinoma	42	(14)	2/42	(4.8)
Large cell carcinoma	12	(4)	3/12	(25)
Leiomyosarcoma	1	(0.3)	1/1	(100)
Mucoepidermoid carcinoma	1	(0.3)	0/1	` (0)
Unclassified	25	(8.3)	9/25	(36)
Total	300	(100)	57/300	(19)

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