Community Acquired Pneumonia in the Gulf

Maj D G Sinclair

MRCP(UK), RAMC

Senior Registrar

Maj N C Hepburn

MRCP(UK), RAMC

Senior Registrar

Capt J Bowen

MB, RAMC

Senior House Officer

Lt Col C R Winfield

FRCP, RAMC

Consultant Physician

33 Field Hospital*, Saudi Arabia, BFPO 637

Introduction

The deployment of units of the British Army to Saudi Arabia took place in two phases, the first consisting of 15000 troops occurred in late October and early November 1990, the second in January 1991 brought the total number of troops in theatre to approximately 35000. A small outbreak of community acquired pneumonia was associated with each troop movement. We report and comment on the clustering of these cases, their management and aetiology.

Patients and Management

Data on patients were obtained retrospectively from admission notes. All were male and presented with pyrexia and classical signs of lobar consolidation, details are shown in Table 1. The patients all came from geographically separate units.

No patient had a productive cough prior to commencing antibiotics. Owing to the problems associated with building an entire hospital under canvas blood culture facilities were not available until the end of the second outbreak.

Table 1
Clinical details of patients admitted

Case No	Admission Date	Age	Cig per day	Length of Prodrome	Peak Temp C	Site of Clinical Signs*	X-Ray Confirmation	Duration of Admission
1	1.11.90	20	0	<1 Day	40	RML	Yes	9 Days
2	7.11.90.	22	0	5 Days	38	LLL	N/A	8 Days
3	10.11.90.	21	10	2 Days	39.5	RLL	N/A	6 Days
4	27.11.90.	20	20	<1 Day	38.5	RLL	Yes	5 Days
5	26.12.90.	18	10	2 Days	39.5	RLL	Yes	14 Days
6	6. 1.91.	25	20	2 Days	40	RML	Yes	12 Days
7	16. 1.91.	24	20	7 Days	37	RML	Yes	3 Days
8	22. 1.91.	21	40	<1 Day	39.5	RLL	Yes	15 Days
9	28. 1.91.	20	10	2 Days	40	LLL	Yes	9 Days

N/A = Not available

*RML Right middle lobe

RLL Right lower lobe

LLL Left lower lobe

*Now Cambridge Military Hospital, Aldershot, Hants GU11 2AN

Patient eight had a positive blood culture for *Streptococcus pneumoniae*. Radiological facilities were initially limited but were fully available by the time of patient four's admission. None of the patients had any of the accepted adverse prognostic indicators for lobar pneumonia (1).

All patients were successfully treated with intravenous (IV) amoxycillin and IV or oral erythromycin except patient seven, who had been treated with oral amoxycillin for five days prior to admission, to which we added oral erythromycin. Apart from patients five and eight who developed sterile sympathetic pleural effusions, all made an uneventful recovery and rapidly returned to duty. Those with a pleural effusion were returned to the United Kingdom for convalescence because of the military situation.

Comment

We have been surprised by the high incidence of this condition, as United Kingdom based studies suggest an incidence of one to three cases per 1000 adult population per year (2), given that our population consists almost entirely of fit, well nourished, young men living in the open air. Also of interest is the temporal association of

these cases with the two phases of troop deployment. Each case originated from a different parent unit in the United Kingdom or West Germany and they were subsequently geographically separate in theatre. In the absence of full microbiological assessment we are unable to comment further on these features.

Our findings support the first line use of amoxycillin and erythromycin in community acquired pneumonia. The occurrence of sterile, high protein, sympathetic pleural effusions in two of nine cases is consistent with other studies (3).

Community acquired pneumonia remains an important cause of morbidity in major deployments of modern armies.

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