Poster sessions

Airway assessment by a SALT team was performed in 4 patients within 48 h of admission. None of the patients underwent video fluoroscopy. An initial dietetic review within 72 h of admission was observed in 6 patients (18%). Median hospital stay was 8 days and in hospital mortality was 41%.

Conclusion The study demonstrates a significant inconsistency in the initial management of patients hospitalised with AP. The lack of early intervention by SALT and dietetic services and routine video fluoroscopy use in the majority of patients is of concern. A specific guideline with an evidence based diagnostic pathwayand management is needed for patients at high risk for AP.

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KLEBSIELLA PNEUMONIAE SURVIVAL ON PLASTIC VALVED HOLDING CHAMBER BODIES

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10.1136/thoraxjnl-2014-206260.228

Introduction and objectives Klebsiella pneumoniae (KPN) is an opportunistic pathogen for patients with chronic pulmonary disease. In-use single time-point sampling of valved holding chamber spacer (VHC) bodies has shown evidence (Cohen and Cohen, JAMA 2003, 290:195–196) of bacterial contamination particularly with *Pseudomonas* species and *Klebsiella*. We are not aware of multi time-point bacterial survival research and, accordingly, have assessed *in vitro* two plastic VHC body materials which are in common use in the UK.

Methods Test pieces, in n = 5 sub-group samples (Samples), of polystyrene (sterile Control) and of VHC bodies of AeroChamber Plus, Trudell Medical International (ACP) and A2A Spacer, Clement Clarke International Ltd. (A2A) were equilibrated for 24 h at 20°C/65% relative humidity (RH). Samples were inoculated with 100 muL distilled-water aliquots of KPN 3.6 \times 106 cells.mL $^{-1}$ and incubated at 20°C in 65% RH chambers. KPN surface survival was measured at 0, 24, 48 and 72 h time-points using a method based on ISO Standard 22196:2007 (Askew, Efficacy Assessment of Treated Articles: A Guidance, February 2014 http://dx.doi.org/10.6027/NA2014–904) and total viable count enumerated. 72 h data (Log10 Colony Forming Units (CFU).cm $^{-2}$) were analysed using one-way analysis of variance.

Results Geometric mean CFU.cm⁻² data are given in the table. Control and ACP KPN populations declined to the 48 h time-point, thereafter increasing (Control) and remaining constant (ACP). A2A KPN population showed a constant decline, with no re-growth. At 72 h, Log₁₀ CFU KPN data for A2A were significantly smaller (p < 0.05) compared to ACP (-0.47 difference, 95% CI -0.81 to -0.13) and to Control (0.74 difference, 95% CI 0.41 to 1.08).

Conclusions We interpret the 72 h increase in Control KPN as the outcome of the initial decline creating dead cell matter that acted as a nutrient source. The stability (ACP) and significant decline (A2A) in KPN is therefore an interesting finding. We subscribe the latter to the presence of an antimicrobial additive in

Sample (n = 5)	Geometric mean KPN CFU.cm ⁻²				
	Contact time (hours)				
	0	24	48	72	
Control	1.8 × 10 ⁵	4.7×10^{5}	2.8 × 10 ⁴	4.8 × 10 ⁴	
ACP	1.8×10^5	5.4×10^4	2.7×10^4	2.5×10^4	
A2A	1.8×10^5	5.1×10^4	1.7×10^4	8.6×10^3	

the body polymer material. The clinical implications of these findings are relevant to VHC hygiene and patient health, and require further investigation.

Smoothing the process: clinical management of COPD and bronchiectasis

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AN EVALUATION OF THE PATIENTS PATHWAY TO ACCIDENT AND EMERGENCY (A AND E) OR INPATIENT ADMISSION FOLLOWING AN EXACERBATION OF ASTHMA OR CHRONIC OBSTRUCTIVE PULMONARY DISEASE (COPD) IN A LARGE TEACHING HOSPITAL

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10.1136/thoraxjnl-2014-206260.229

Introduction Asthma and COPD account for a significant proportion of inpatient admissions in the UK. A national review of asthma deaths found that a significant proportion of patients die without seeking medical assistance or before emergency medical care could be provided.¹

Objectives Establish the pathway that patients undertake to access care in the lead up to an A and E attendance and/or inpatient admission.

Method Patients attending A and E and/or following an inpatient admission due to an exacerbation of asthma or COPD were reviewed by a respiratory pharmacist during weekday working hours. Patients were identified during post take ward rounds and using hospital electronic systems. All analyses were conducted using SPSS 22. Ethics approval was not required.

Results Over the six-month period, 539 (138 asthma and 403 COPD) presentations for exacerbations of asthma and COPD were reviewed. As Table 1 shows, only 48% (n = 66) and 46% (n = 185) of asthma and COPD patients respectively, received medical attention and/or had an active intervention (e.g. administration of rescue pack of oral corticosteroids and/or antibiotics) prior to presenting to hospital. The remaining 52% (n = 72) and 54% (n = 218) respectively either did not seek medical attention or were unable to be reviewed (e.g. unable to obtain an appointment with their general practitioner, GP) prior to their attendance. The results also show that the majority of patients were registered with a GP.

Conclusion Despite the majority of patients having access to a GP, a significant proportion of asthma and COPD patients either did not seek medical attention prior to presenting to hospital, or were unable to be reviewed by their GP. These findings correlate with those found in the national review of asthma deaths. At a time of increasing demands on healthcare resources, these results pose the question of how we can better triage patients to

	Asthma (n = 138)	COPD (n = 403
Registered with GP	135 (98%)	392 (97%)
Patients who sought medical		
attention and/or active intervention	66 (48%)	185 (46%)
Patients who sought medical		
attention but did not receive it	20 (14%)	42 (10%)
Patients who did not seek		
medical attention and/or active intervention	52 (38%)	176 (44%)

A114 Thorax 2014;**69**(Suppl 2):A1–A233