

**Results** 11% (n=16) patients presented between 00:00 and 06:00 h, 36% (n=50) between 06:00 and 12:00 hours, 30% (n=43) between 12:00 and 18:00, and 22% (n=31) between 18:00 and 24:00 ( $\chi^2=18.3$ ,  $p<0.05$ ). Average Wells Scores were 4 (SD $\pm$ 2), 6 (SD $\pm$ 1), 4 (SD $\pm$ 2) and 5 (SD $\pm$ 2) for the respective times. Patients with bilateral emboli affecting the main pulmonary arteries were distributed as follows: 00:00–06:00 (n=2), 06:00–12:00 (n=17), 12:00–18:00 (n=10), 18:00–24:00 (n=9) ( $\chi^2=10.7$ ,  $p<0.05$ ). Patients with unilateral emboli affecting the main pulmonary arteries were found to present as follows: 00:00–06:00 (n=3), 06:00–12:00 (n=11), 12:00–18:00 (n=10), 18:00–24:00 (n=7) ( $\chi^2=5.00$ ,  $p=0.17$ ). Patients with bilateral emboli affecting the segmental arteries presented at: 00:00–06:00 (n=4), 06:00–12:00 (n=12), 12:00–18:00 (n=8), 18:00–24:00 (n=3) ( $\chi^2=7.52$ ,  $p=0.05$ ). Patients with unilateral emboli affecting the segmental arteries presented at: 00:00–06:00 (n=5), 06:00–12:00 (n=5), 12:00–18:00 (n=8), 18:00–24:00 (n=5). ( $\chi^2=1.17$ ,  $p=0.76$ ) In the 4 time intervals, patients with >2 symptoms of chest pain, dyspnoea, or haemoptysis were found to be distributed as: 00:00–06:00 (n=8), 06:00–12:00 (n=26), 12:00–18:00 (n=16), 18:00–24:00 (n=17) ( $\chi^2=9.72$ ,  $p<0.05$ ).

**Conclusion** Pulmonary Emboli were most frequent between 06:00 and 12:00 h during which there was more extensive radiographical findings, associated with a higher Wells score, and more profound symptoms. This suggests a circadian pattern of the presentation of pulmonary emboli, correlating with the clinical and radiological severity of disease.

P256

#### INVESTIGATING SUSPECTED PULMONARY EMBOLISM AS OUTPATIENT: THE PORTSMOUTH EXPERIENCE

doi:10.1136/thx.2010.151076.7

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**Introduction** Suspected PE is a common acute medical presentation. It continues to be a significant burden on the healthcare resources, hence it makes sense to investigate and manage stable patients with suspected PE as outpatient. There is very limited evidence available on the safety of investigation of PE as outpatient. The aim of this study was to review the outcomes of investigation for PE on outpatient basis.

**Methods** During 6 months period from November 2007 to April 2008, 176 patients were investigated for suspected pulmonary embolism as outpatient, based on clinical criteria of stability (eg notachycardia, tachypnea or hypotension). All of these patients were treated with enoxaparin from the day of admission till the diagnosis of PE was confirmed or excluded. We randomly selected 92 of these patients and retrospectively reviewed their clinical notes. The data recorded included pulse, blood pressure, respiratory rate, PO<sub>2</sub>, PCO<sub>2</sub>, Trop t and D.dimer. We also looked at the number of days patients had to wait for the CTPA or VQ scan. All patients were reviewed in clinic after a VQ scan or CTPA.

**Results** 12 out of 91 (13.2%) patients were diagnosed with PE. There were no deaths and no significant complications recorded from either PE or enoxaparin therapy. Average time taken for PE to be diagnosed or excluded was 3.86 days. There were no significant differences in clinical or physiological parameters between groups apart from PO<sub>2</sub>, which was significantly lower in the group with PE (p 0.032) (Abstract P256 Table 1).

#### Abstract P256 Table 1

Characteristic	Total (mean)	PE diagnosed	PE excluded	p-Value
n	91	12 (13.2%)	79 (86.8%)	
Age	50.01	56.83	49	0.187
Female	63	7 (11.1%)	56 (88.9%)	
Male	28	5 (17.9%)	23 (82.1%)	
PO <sub>2</sub> (kPa)	10.96	9.84	11.15	0.032
PCO <sub>2</sub> (kPa)	5.28	4.66	5.38	0.214
RR (n/min)	17.42	17.58	17.4	0.844
SaO <sub>2</sub>	97.01	96.33	97.12	0.403
Systolic	140.32	130.41	141.83	0.248
Diastolic	80.67	81.16	80.59	0.909
HR	85.2	92.25	84.1	0.166
Trop T	0.07	0.14	0.05	0.408
D.Dimer	1.33	2.28	1.18	0.295
Request to test time (days)	3.86	5	3.68	0.427

**Conclusions** We conclude from this small series that it may be safe to investigate suspected PE as outpatient in selected clinically stable patients, though this needs to be confirmed in larger studies with an evaluation of health economic benefits.

P257

#### A COMPARISON OF SCORING SYSTEMS IN THE MANAGEMENT OF A RANGE OF PULMONARY EMBOLISM PATIENTS IN A UNIVERSITY HOSPITAL

doi:10.1136/thx.2010.151076.8

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**Introduction** Pulmonary embolism (PE) is a leading cause for inpatient admission and inpatient mortality in the UK. Its clinical features are often nonspecific, making a diagnosis of pulmonary embolism difficult and without appropriate treatment; a pulmonary embolism can be fatal. We compared three scoring systems (Geneva and Wells score, which are both predictive tools and Pulmonary Embolism Severity Index (PESI) a risk stratification tool) in three distinct patient groups; those whose primary cause of death was pulmonary embolism, those whose management required admission or patients managed on an outpatient basis.

**Methods** A retrospective review of case notes for patients with the primary diagnosis of pulmonary embolism from 2009 to 2010 was performed at the Oxford Radcliffe NHS Trust, applying the Wells, PESI and Geneva scoring systems. Death from PE was defined by the presence of a PE or it being listed as the primary cause of death on the death certification in combination with concordant view of a senior clinician of the medical team. Outpatient management was based on patients having a zero length-of-stay. All groups were distinct.

**Results** See Abstract P257 Table 1 for selected results.

**Discussion** Across all our group of patients, the PESI outperformed both the Wells and Geneva score. Patients who died from PE were older and more hypoxic, and often caused most diagnostic difficulty presenting with non-respiratory symptoms in over half of the cases. Abnormal chest radiograms were common in all groups and although Ddimer assists in diagnosis other biomarkers such as troponin and BNP were not helpful. The PESI also outperformed the other scores as aid on deciding to manage patients with PE as an outpatient, but still with a degree of uncertainty.

In conclusion, PESI should be considered in the management and risk stratification of PE and PE should be always considered in older patients with non specific clinical features, abnormal