

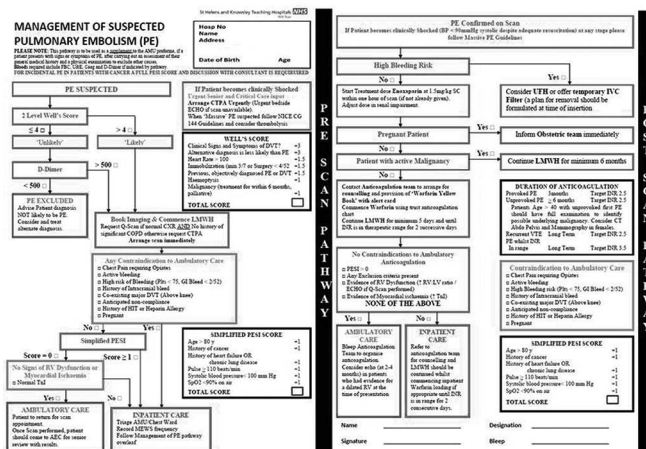
Background We observed a high number of patients admitted with suspected pulmonary embolism (PE) via our acute medical unit. After positive diagnosis, they remained as inpatients until their International Normalised Ratio (INR) was in range resulting in long lengths of stay - Median (range) 7 (0 to 52) days. Recently, there has been increasing interest in ambulatory management providing high quality cost-effective care.

Objectives To develop a care pathway for suspected PE incorporating prognostic scoring to assist ambulatory same-day management. To assess cost effectiveness of such a strategy in terms of bed day release whilst ensuring that it did not adversely affect safety by misclassification of patients.

Method We formulated an ambulatory pathway (figure1) with an algorithm comprising of the simplified PESI (pulmonary embolism severity index) score and serum Troponin I measurement with various exclusion criteria to identify patients fit for ambulatory management. Over a 3-month period, 191 patients underwent computerised tomography pulmonary angiogram (CTPA) for suspected PE. 28/191 patients were excluded from analysis as they were outpatients or pre-existing inpatients. We retrospectively applied the pathway to the remaining 163 patients. To assess the impact of the pathway, we measured increase in the number of patients that could have been managed using same-day emergency care, incremental bed day release and benefits derived via the enhanced tariff through Payment by Results (PbR). Safety was assessed by noting mortality within the ambulatory group identified.

Results 73/163 (44%) patients were male and mean (SD) age was 62 (17.8) years. Using our pathway, 36/163 (22%) of all suspected PEs could have been managed within a zero-day admission. 5/36 (14%) with a definite PE could have been managed as ambulatory patients. A mean incremental stay of 4 days for the 36 patients equates to 144 bed days released over the 3-month period. The PbR additional income on completion of a same-day emergency management would add £225/patient to savings made. None of the patients selected for ambulatory management via the pathway suffered any adverse events.

Conclusion We have successfully developed and implemented an effective ambulatory management strategy for suspected PE. A validity study is planned.



Abstract P153 Figure 1.

P154 OUTPATIENT MANAGEMENT OF PULMONARY EMBOLISM-PATIENT CHARACTERISTICS AND OUTCOMES

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Introduction Management of Pulmonary Embolism (PE) has been until recently largely in-patient based and markedly affects length of stay in these patients. Recent evidence suggests that suspected or confirmed cases of PE can be managed out of hospital^{1, 2}. We present our experience of outpatient management of PE in a small district general hospital.

Method We identified 35 patients investigated/treated for PE as outpatient between March 2012 and June 2013. Demographic and clinical data was collected from case notes. Statistical analysis was performed on Medcalc based on normality.

Result The table below profiles our cohort. (Table)

There was a high PE diagnosis (51%) within our cohort despite most patients being in a low PESI class. Clinical decision made in high PESI class to manage as outpatient. PE was diagnosed in 4 of the 5(80%) patients with a raised Troponin level (odds ratio 1.66, statistically not significant). Out of 21 GP referrals, 13(61.9%) had a positive scan as opposed to 5 of the 13 (38.4%) patients referred from hospital, however this did not attain statistical significance (odds ratio 3.25, p = 0.12). The equivocal CTPA was deemed not PE on clinical grounds. All patients were reviewed by a Registrar or Consultant prior to discharge. No mortality recorded till date. One patient re-presented with exacerbation of Asthma.

Discussion Carefully selected patients with suspected or confirmed PE can be managed out of hospital. Based on time to imaging, at least 28 unnecessary inpatient days were avoided leading to £9800 saved and a high pick up rate. In our experience, mortality and re-admission rates have been minimal highlighting outpatient management as a safe and cost-effective strategy in management of PE.

REFERENCES

1. Safety of outpatient treatment in acute pulmonary embolism. Erkens PM, Gandara E, Wells P, et al. *J Thromb Haemost*, Nov 2010, vol/iss. 8/11(2412-7), 1538-7836
2. Outpatient Management of suspected Pulmonary Embolism at a District General Hospital; A Two Month Review. JA Benjamin, A Griffiths, S power, et al. *Thorax* 2012;67:A123 doi:10.1136/thoraxjnl-2013-204457.305

Abstract P154 Table 1.

Referral source-number of patients	General Practice-17, A&E-10, Clinics-4
Time of assessment	Out of Hours-18, Working hours-17
Sex	Females-25, Male-10
Age-Mean(SD)	51.26(18.85)
D-dimer, range(Median)	50-6793(512)
Positive Troponin	5/30 (16.6%) (not done in 5 cases)
PESI Class 1-2(low risk)	33/35 (94.2%)
CTPA done in 24 hours	24/35 (68.5%)
Result	Positive-18, Negative-16, Equivocal-1

SD-Standard Deviation. PESI- Pulmonary Embolism Severity Index.

P155 ARE WE UTILISING CT PULMONARY ANGIOGRAPHY APPROPRIATELY IN THE DIAGNOSIS OF SUSPECTED PULMONARY EMBOLISM? A THREE MONTH REVIEW IN A DISTRICT GENERAL HOSPITAL

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