Abstract S75 Table 1

Median (Range)	No Redo	Redo	p-value
Number	40(22M:18F)	18(11M:7F)	
Age (Year)	68(43-82)	69(57-80)	0.2605
BMI (Kg/m ²)	22(13-37)	25.4(16.1-34.2)	0.1652
LUL:LLL	23:10	5:5	NS
RUL:RLL	5:2	4:4	NS
Upper:Lower	28:12	9:9	0.237
FEV1 (%predicted)	28.8(13.8-58)	35.3(17-62)	0.0351
DLCO (%predicted)	37.8(10.7-84)	38(19-61)	0.4346
RV (%predicted)	209(43.2-350.6)	211(130-289)	0.1750
Fissure Integrity			
Target:Non-Target Lobe Volume Ratio	1.12(0.6-2.22)	0.96(0.48-1.56)	0.1429
Target:Non-Target Lobe Perfusion Ratio	0.4(0-1.5)	0.32(0.19-0.91)	0.2214
Target:Non-Target Lobe Emphysema Severity (Voxel Density <910 HU)	1.25(0.67-6)	1.23(0.83-2.86)	0.3494
Target:Non-Target Lobe Emphysema Severity (Voxel Density <950 HU)	1.61(0.55-26.5)	1.69(0.75-4.8)	0.2492
Pathogenic Bacteria Post-Initial EBV	3	2	NS
Pneumothorax Post-Initial EBV	17	2	NS

S76 CHEST TRAUMA: AN EXPERIENCE OF A RESPIRATORY SUPPORT UNIT WITH LEVEL 2 CARE IN THE NORTH EAST OF ENGLAND

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Introduction Falls cause 75% of trauma in patients above 65 years of age and thoracic trauma is the second commonest injury; rib fractures are the commonest thoracic injury. There is wide variation in care. Older trauma patients are less likely to have trauma assessments. Rib fractures carry up to 12% mortality with up to 31% developing pneumonia.¹ The number of fractures correlates with morbidity. Northumbria Healthcare has a team of respiratory consultants, physiotherapists, specialist nurses and anaesthetists for rib fracture management on a respiratory support unit.

Methods With Caldicott approval, basic demographics and clinical outcomes of patients admitted with thoracic trauma between Aug 20-Apr 21 were analysed. Descriptive statistical methodology was applied.

Results 119 patients were identified. Mean age was 71.1 years (range 23–97). 53 were male, 66 female. Mechanism of injury were falls from standing (65), falls down stairs/bed or in the bath (18), ladders (4), cycling (12), assault (3), road accidents (8) and 9 others (for example off horses). LOS was 7.3 days (range 1–54). 85 patients had more than 1 co-morbidity. 26 had a full trauma assessment and 75 had pan CTs. Mean number of rib fractures was 3.6. 31 (26%) had a pneumothorax and/or haemothorax. 18 chest drains were inserted (all small bore) and 1 needle aspiration done. No cardiothoracic input was required. Isolated chest trauma was present only in 45 patients. All had pain team review, 22 erector spinae catheters were inserted with 2 paravertebral blocks. 82 patients did not require oxygen, 1 required CPAP and 1 HFNC. 7 needed intensive care transfer. 20 (17%) developed

pneumonias. 16 (14%) deaths occurred within 30 days (1 heart failure and cancer progression, 2 Covid and 14 pneumonias)-all were in those with falls from standing. There was no correlation between number of fractured ribs, length of stay and mortality.

Conclusions High level care for thoracic trauma can be performed by the respiratory team with analgesia managed by the pain team. 42% of pneumothoraces/haemothoraces were observed. Falls from standing are associated with significant mortality and morbidity. The service is now complemented by a frailty assessment service.

REFERENCE

1. <https://academic.oup.com/ageing/article/49/2/161/5673134>

S77 THE EFFECT OF SURGERY ON LUNG FUNCTION IN PATIENTS WITH IDIOPATHIC SCOLIOSIS

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Introduction Idiopathic scoliosis, the most common form of scoliosis, results in an abnormal lateral curvature of the spine. It typically affects children aged 10–16 and can result in pain and reduced respiratory function largely due to a restrictive lung defect. Treatment can involve bracing and surgical procedures and it is currently unclear how these treatments affect lung development.

Methods We performed lung function studies on 26 children with idiopathic scoliosis before and at 1–3 years after spinal surgery. Mean height for age was used to calculate lung function scores instead of measured height due to the effects of