group had treatment (surgery with incomplete excision). Differences between the groups did not reach statistical significance.

Conclusions This single centre retrospective study in a predominantly Caucasian population replicates pleural recurrence rates from Hong et al.¹ This data might inform local processes but large prospective databases are required for national guidance. Significant limitations to this are its retrospective nature, reliance on coding, and length of follow up. Local recurrence is associated with Incomplete surgical resection and possibly the preceding biopsy.

REFERENCE

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P171 SABR: ACCEPTABLE AND EFFICACIOUS: A 7 YEAR EXPERIENCE FROM A NORTH EAST HOSPITAL

A Aujayeb. Northumbria Healthcare NHS Foundation Trust, Newcastle upon Tyne, UK

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Introduction Stereotactic Ablative Body Radiation Therapy (SABR) is a treatment for inoperable stage 1 non-small cell lung cancer. Surgery is the gold standard (5-year survival rates ~70%).^{1 2} In a review of 4570 patients treated with SABR, overall local control rates were on average 92.7% at 1 year, 89.9% at 2 years, 86.7% at 3 years and 89.6% at 4–5 years with corresponding overall survival rates of 87%, 82.9%, 59.6% and 39.6% with a mean follow-up of 29.4 months.¹ No local review has ever been performed. We sought to add to the literature and inform local practice.

Methods All patients with Stage 1 lung cancer receiving SBAR from the local Somerset cancer register were identified (local Caldicott guidance). on radiology reports Basic demographics and outcomes were collated.

Results 100 patients received SBAR from Jan 2013-Dec 2020. 61 were female, mean age was 76.5 years (range 48–97). Overall recurrence rate was 19% (n=19) [8 local recurrences and 11 metastatic]. Mean time to recurrence was 24.3 months. Due to concerns about biopsies causing recurrence, those with no pre-SBAR biopsy were analysed separately. 72% (72) patients were identified: recurrence rate was 13 (18%)- 4 local and 9 metastatic; mean time to recurrence 26 months. Survival was 90% at 1 year, 89% at 2 years, 65% at 3 years and 40% at 4–5 years. In the biopsy group (n=28), 25 did not have surgery and had SABR. 3 had post-operative SABR. Recurrence rate was 21% (6), mean time to recurrence in this cohort was 20 months, 4 local recurrences, 2 metastatic. Survival at the same above intervals were much lower (15% at 5 years). There was no statistical difference between the groups. Data on immediate toxicity was not available due to SBAR being performed in a regional centre but no adverse events were noted on local scans.

Conclusions This review shows that recurrence rates are comparable to previous evidence and surgical recurrence rates (30–77%).² SABR seems safe. There are significant limitations to this data set (retrospective nature, reliance on coding, no matched controls and no comparison to surgery locally).

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P172 INDWELLING PLEURAL CATHETER REMOVAL AND AUTO-PLEURODESIS: PREDICTORS AND OUTCOME

DN Addala, EO Bedawi, A Sundaralingam, R Banka, M Ellayah, N Kanellakis, Y Zhao, NM Rahman. Oxford University Hospitals NHS Foundation Trust, Oxford, UK

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Introduction Indwelling pleural catheters (IPC) provide definitive management of malignant pleural effusion. IPCs offer similar control of dyspnoea to talc pleurodesis without hospital admission but require ongoing management. Up to 47% of patients with IPC undergo auto-pleurodesis facilitating removal. Patient factors leading to this are not well understood.

Methods Retrospective analysis of IPC data at a UK tertiary centre between 2019–2021. Procedure reports, radiology, pathology and electronic patient records were reviewed to assess the most frequent diagnoses, imaging, and pleural fluid biochemistry leading to IPC removal. Outcomes and complications were analysed.

Results 115 patients underwent IPC insertion and 55 patients (47.8%) underwent IPC removal over the two year period. The median duration between insertion and removal was 97 days (IQR 62–133).

Indications 71% (39/55) of IPC removals were undertaken due to auto-pleurodesis, with other causes comprising of pain (3.6%; 2/55), blocked catheter (3.6%; 2/55) and non-draining, organised effusions (21.8%; 12/55).

The most common primary malignancies associated with auto-pleurodesis included mesothelioma (31%, n=12), lung (18%, n=7), breast (18%, n=7).

Lung-Sliding on Ultrasound Prior to IPC insertion Of the patients that underwent auto-pleurodesis, 24 had documentation pertaining to lung sliding on ultrasound. Lung sliding was present pre-insertion in 87.5% (21/24) and absent in 12.5% (3/24).

Inflammatory-Biochemistry Median pleural fluid LDH in patients with auto-pleurodesis was not significantly different vs baseline LDH in all patients with MPE (236.5IU/L auto-pleurodesis vs 326IU/L in all MPE, P>0.05, Mann-Witney).

Complications IPC removals resulted in few complications with retained catheter fragment (7.2%; 4/55) being the most reported. No patients required admission for a procedure related complication. Following IPC removal, 4 patients required further pleural aspiration and 3 re-insertion of IPC.

Conclusions A significant proportion of patients with IPC undergo auto-pleurodesis. In this cohort of patients IPC removal presents a low risk of complications and offers significant benefits to patient comfort. The presence of lung sliding on ultrasound prior to insertion appears to be correlated with auto-pleurodesis, and this requires further investigation in larger prospective studies. The ability to give patients more information regarding likelihood of auto-pleurodesis could add to the decision making process for definitive fluid control.

Abstract P172 Figure 1 a) Chart illustrating number of IPC insertions, removals and indications for removal; b) Chart illustrating number of patients with auto-pleurodesis with lung sliding on ultrasound prior to insertion of IPC

Perspectives on education, training and research collaboration

P173 MIND THE GAP! RESEARCH EXPERIENCE OF RESPIRATORY TRAINEES- A NATIONAL SURVEY

¹V Randles, ²T Jones, ³NM Rahman, ³T Harman, ³A De Soyza. ¹Department of Respiratory Medicine, Liverpool University Hospitals NHS Foundation Trust, Liverpool, UK; ²Department of Respiratory Medicine, Basingstoke and North Hampshire Hospital, Basingstoke, UK; ³Respiratory National Specialty Group, NIHR Clinical Research Network, London, UK

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Introduction Over the last decade there has been a surge in the number of trainee research collaboratives, notably in surgery and anaesthetics. These networks give trainees a new pathway to gain valuable experience of research design and implementation. Trainee collaboratives in medical subspecialties remain a minority, with only three in respiratory. The National Institute for Health research (NIHR) national Respiratory National Specialty Group has a 5-year strategy that includes 'developing researchers of the future' and therefore are keen to promote these collaboratives.

Methods With the support of the NIHR a self-reported cross-sectional survey was conducted to investigate the research experience and views of current respiratory trainees. All current respiratory trainees (n=768) were invited to take part in a short web-based survey via emails cascaded by local Training Programme Directors.

Results 97 (12%) complete responses were received with a good spread from across England and training grades.

Unfortunately, no responses were received from the devolved nations. The majority (62%, 60/97) of trainees had not taken time out of training for research and only 38% (23/60) of these trainees had experience of research during their training. However, this number improved during the recent pandemic with 58% (56/96) of trainees supporting COVID-19 trials. Trainees could only access a trainee research network in 3 of the 15 local CRN geographic areas. Of those without, 88% (61/69) were interested in joining one. Perceived barriers to performing research included lack of time and lack of awareness of how to get involved (*see figure 1*). Training needs identified included networking with local mentors and online research training and support.

Conclusion Clinical research can significantly improve patient outcomes and is a core curriculum requirement for trainees.

Abstract P173 Figure 1 Perceived barriers to undertaking research during respiratory training