

# Letter to the Editor

## Brief communication on indwelling pleural catheter removals

Dear Editor,

In our previous publication, an analysis of IPC removals was in progress<sup>1</sup>. All removals are done in theatre, with pre-operative antibiotics. Talc is not instilled and aggressive drainage not pursued. A retrospective review of all IPCs removed between Jan 2015 and Oct 2020 was conducted. Demographics, clinical details and outcomes were collected. Descriptive statistical methodology was applied. Total number of IPCs performed was 229. Number of IPCs removed was 63, (27.5%). 37 (58.7%) patients were male. Performance status (PS) was 0 (22), 1 (25), 2 (10) and 3 (6). Diagnoses were benign fibrinous pleuritis (5), liver failure (1), heart failure (1), mesothelioma (18), lung cancer (14), breast cancer (11), other cancers (9) and unexplained effusions (4). Median time to removal was 183 days (IQR: 98-265; range: 27 to 434). Pleural fluid cytology was not sent in 1, inconclusive in 8, suspicious in 1, negative in 28 (mean time to removal 187 days) and positive in 25 (mean 193) [ $p = 0.66$ ]. There was no non-expandable lung in 58 (92%). 37 patients received chemotherapy, 3 after IPC removal only. There was no difference in time to removal between those receiving chemotherapy or not. [34 (mean 183 days) vs. 26 (195),  $p = 0.26$ ]. There was no pleural fluid infection before removal. Mean days to removal with loculations was 151 (n=17) vs. 195 (n=46) with no loculations [ $p \leq 0.05$ ]. 2 IPCs fractured and the distal end of 1 was cut as it could not be removed. 1 patient developed post removal cellulitis. No patient required further interventions. IPC removal is more likely in the absence of lung entrapment, in patients with good PS and loculations<sup>2</sup>. Treatment with chemotherapy with an IPC in situ and positive cytology are not associated with a reduced time to removal<sup>2</sup>. Failure to remove is less than 5%. This will be used to inform local pathways.

### Conflict of Interest

The Authors declare that they have no conflict of interests.

### Approval

Local Caldicott approval was sought and granted.

### References

- 1) Aujayeb A, Jackson K. Indwelling pleural catheters for malignancy related pleural effusions. *Eur Rev Med Pharmacol Sci* 2020; 24: 11716-11718.
- 2) Porcel JM, Torres M, Pardina M, Civit C, Salud A, Bielsa S. Predictors of indwelling pleural catheter removal and infection: a single-center experience with 336 procedures. *J Bronchology Interv Pulmonol* 2020; 27: 86-94.

A. Aujayeb, E. Hill

Respiratory and Acute Medicine Consultant, Northumbria HealthCare NHS Foundation,  
Newcastle, United Kingdom