Title: Conservative pneumothorax management: How big is too big?

Body: Guidelines on primary spontaneous pneumothorax (PSP) management differ but commonly recommend intervention especially for larger PSPs. Evidence for recommending intervention over conservative management, even for large PSPs, appears scarce. We believe intervention is rarely required, that complications can and do ensue, and that conservative management of PSP has good outcomes without the risks associated with guideline-mandated intervention. Conservative management of large PSPs is outside current guidelines, despite a long international and local history of large PSPs being successfully managed in this way. We sought to examine the evidence base for compelling reasons to change our current conservative practice. We are conducting a Cochrane Review of management of PSP; this is ongoing. We have performed a retrospective review of PSP patients admitted to our hospital and mostly managed conservatively, with good outcomes, no complications, and no increased need for pleurodesis. Finally, here, we describe six consecutive PSP cases, all large, treated conservatively outside current guidelines but with no complications and good outcomes. Patient satisfaction with this treatment was high. Pain scores, hospital stays, subsequent need for surgery, and complication rates were low in this small series, although there were more outpatient follow up appointments during the recovery phase. Our review has found that current clinical guidelines on interventional PSP management have a limited evidence base. Our observations suggest that conservative management may be as safe and effective in many PSPs, regardless of size. We continue to study PSP cases prospectively.