9.05 Physiotherapy-led Lung Ultrasound in a Cardiothoracic Unit: A Service Evaluation

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The use of lung ultrasound (LUS) by respiratory physiotherapists is increasing due to greater diagnostic accuracy of LUS compared to conventional assessment tools of auscultation and chest x-ray interpretation in identifying post-operative pulmonary complications (PCC) such as consolidation, pleural effusion, pneumothorax and interstitial syndrome. The aim of this service evaluation was to explore the use of LUS by physiotherapy in a post cardiothoracic surgery population.All cases between September 2021 and April 2022 where physiotherapy assessment incorporated LUS were retrospectively reviewed. Data collected included trigger for LUS assessment, LUS findings and recommendations based on findings. Data was analysed using descriptive statistics.Forty-two patients were assessed using LUS. Triggers for LUS assessment included failure to wean from mechanical ventilation (n=3), failure to wean from oxygen therapy (n=28) and dyspnoea limiting rehabilitation (n=11). Findings are outlined in Figure 1. Based on findings further physiotherapy treatment including airway clearance and volume recruitment was recommended in 11 cases. In 31 cases findings were not amenable to physiotherapy and were escalated to the medical team. Timely and appropriate treatment of PPC hinges on accurate diagnosis. Use of LUS aids the identification of PCC amenable to physiotherapy and expedites escalation of cases not amenable to physiotherapy.



Figure 1(9.5). Lung ultrasound assessment findings

Conflict of Interest: None to declare