



The CLAMP Project
Characterising Leak of Air in Medical Pneumothorax

anthony.martinelli@nhs.net

niki.veale@nhs.net

Dear Colleague,

We are delighted that you are interested in participating in our multicentre service evaluation of chest drain clamping trials in UK patients admitted with pneumothorax. We are proud that our project is supported by INSPIRE, the UK's trainee-led collaborative respiratory research network.

Pneumothorax is a common cause of presentation and admission to hospital, but its management is often based on experience rather than evidence. In particular, pneumothoraces are frequently managed by insertion of a chest drain, but there are no protocols for deciding when this chest drain should be removed, with practice varying between clinicians. Many practitioners use trials of "clamping" the drain to mimic removal, but the evidence for this practice is limited to small studies. It is possible that optimising this process could result in improved experience for patients and providers by reducing the need for prolonged hospital admissions or repeated pleural interventions.

The most recent pleural guidelines from the British Thoracic Society, published in 2023, identify defining the utility of "clamping trials" prior to removal of chest drains as an open research question. We therefore seek to collect data from UK hospitals to determine:

- (1) How frequently are chest drain clamping trials performed?
- (2) Are chest drain clamping trials associated with reduced risk of recurrent pneumothorax and need for pleural intervention?
- (3) Are chest drain clamping trials associated with any difference in length of stay?

Our project has been approved as a multicentre service evaluation by our lead centre, Cambridge University Hospitals NHS Foundation Trust. It is limited to retrospective review of patient records and data collection. Data will be collected via REDCap, a purpose-built and secure web application.

We once again thank you for your interest and are more than happy to further discuss any queries or concerns.

Yours faithfully,

Dr Anthony Martinelli
Project Co-Lead

Dr Niki Veale
Project Co-Lead

Prof. Stefan Marciniak
Project Supervisor

Dr Akhilesh Jha
Chair, INSPIRE

Prof. Najib Rahman
NIHR CRN Lead, Respiratory Disease