

Category : **Respiratory: mechanical ventilation**

**A274 - High flow nasal oxygen and continuous positive airway pressure therapy for covid-19: an observational study of outcomes**

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### **Introduction:**

High flow nasal oxygen (HFNO) and continuous positive airway pressure (CPAP) therapy are recognised treatments for hypoxia which were widely used throughout the COVID-19 Pandemic. Large scale studies such as RECOVERY-RS[1] compared HFNO and CPAP to conventional oxygen therapy in patients suitable for mechanical ventilation. TSDFT had capacity to offer ward based HFNO/CPAP to patients deemed both suitable and not suitable for mechanical ventilation. We set out to review the outcomes of all patients who received HFNO/CPAP for COVID-19 Pneumonitis at our trust.

### **Methods:**

A retrospective observational study of all patients with COVID-19 Pneumonitis who received CPAP/HFNO was conducted at a district general hospital in South West England. Electronic records and ICD10 diagnostic codes were reviewed between September 2020 and October 2021.

### **Results:**

90 patients received HFNO or CPAP. The median age was 68 years. 50 (55%) survived to hospital discharge. Survival to hospital discharge was greater in females (71%) than males (42%). Survival decreased from 100% in the 21-30 years age group, to 33.3% in the >70 years age group. On review of co-morbidities the overall survival rate was similar, except for patients with cardiac failure or valvular disease, of which only 4 of 19 patients survived (21%) All patients under 40 years survived to hospital discharge. There was no relationship between number of days of therapy and survival to discharge.

### **Conclusion:**

Among this cohort, survival to hospital discharge after HFNO or CPAP for COVID-19 Pneumonitis was greater in younger patients, females and those without cardiovascular failure.

### **References:**

1. *G.D Perkins* medRxiv Pre-print 2021 doi:<https://doi.org/10.1101/2021.08.02.21261379>