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#### INVASIVE ASPERGILLOSIS WITH COVID-19 IN INTENSIVE CARE - A RETROSPECTIVE COHORT STUDY

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#### Abstract

**Background** - Invasive pulmonary aspergillosis(IPA) is a known opportunistic infection with a high in-hospital mortality and corticosteroids as therapy for COVID-19 could increase the risk of IPA.

**Methods** - In this retrospective cohort study, we aimed to assess the association of IPA and corticosteroids in ventilated COVID positive patients from March 2020 to April 2022 in two ICUs. Data collected includes use of corticosteroids, anti-fungals, IPA screening and corresponding imaging. Data was analysed for IPA incidence and ICU mortality between corticosteroid negative(CS - ) and corticosteroid positive (CS +) cohorts.

**Results** - 64 patients were included - mean age was 55.8(SD 14.4, SEM 1.8) and 67.1% were male. 53(82.8%) received corticosteroids. The incidence of IPA was significantly lower in CS - patients vs CS + patients (0% vs 45.2%, p value 0.0063) and this was statistically significant. The ICU mortality was 14.6% vs 30.4% in patients who did not test positive vs tested positive for IPA respectively (p value 0.13)

**Conclusions** - While corticosteroids are beneficial in managing COVID-19, evidence shows an association between corticosteroids and testing positive for IPA.

**Keywords** COVID-19, Aspergillosis

**Disclosures** - The authors declare that they have no conflict of interest