# Association of Androgenetic alopecia and severity of Coronavirus disease 2019 (COVID- 

 19).NCT NUMBER: NCT04898166
Protocol ID: NO.F.2-81/2021-GEN/56923/JPMC
Date 31 march 2021

OBJECTIVE: Association of Androgenetic alopecia and severity of Coronavirus disease 2019 (COVID-19).

PLACE OF STUDY: COVID-19 isolation unit of Jinnah postgraduate medical center (JPMC) Karachi, Sindh province, Pakistan.

RESEARCH METHODOLOGY: This study is conducted on patients admitted in COVID-19 isolation unit of JPMC Karachi. Permission from the institutional ethical review committee is taken prior to conduction of study, demographic data and written informed consent is taken from every patient. Sample size of study is 300 hospitalized patients of COVID-19. Detailed history and examination of patients conducted in COVID-19 patients. Scoring of AGA be evaluated using Hamilton-Norwood scale (HNS) in men and Ludwig scale in female. Severity of the COVID-19 be measured by COVID severity score (A-DROP). Study is aimed to evaluate association of AGA and severity of COVID-19, frequency of AGA in covid 19 and whether the lung involvement correlates with the severity of AGA or whether the proportion of AGA is higher in intensive care/fatal COVID-19.

STATISTICAL ANALYSIS PLAN : Data will be analysed using SPSS version 23 registered for Microsoft windows. Mean and standard deviation will be calculated for expression of quantitative variables like age, weight, duration of disease symptoms. Frequencies and percentages will be calculated for the qualitative variables like gender, co-morbidities, frequency and severity of AGA, disease outcome and AGA associated with severity of COVID-19. Effect modifiers like age, gender, weight, co-morbidities, duration of symptoms will be controlled through stratification. Post-stratification will be recalculated and chi-square test will be applied. P-value of $<0.05 \%$ will be considered as significant.

