

CORRESPONDENCE

CORONA EXPERIENCE

Be careful when stopping short term dexamethasone therapy in SARS-CoV-2 infection: An experience

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SARS-CoV-2 pandemic has taken a toll on the physical as well as mental health of the human race across the world. The potential lethality of the disease has led to the indiscriminate and desperate use of medications. The impact of the pandemic on the health care professionals has been unprecedented.

Corticosteroids, especially dexamethasone has been considered a key player in the treatment of severe SARS-CoV-2 infection.¹ However, adequate caution must be taken during treatment with dexamethasone in Covid cases. I take this opportunity to share the story of my struggle with Covid and dexamethasone. I am a 35-year-old female with a past history of recurrent autoimmune pan uveitis which required treatment with oral prednisolone for over two and a half years. I started having body ache, on and off fever (not exceeding 100°F) and sore throat shortly after my husband, who is a neurointensivist posted as the in-charge of Covid intensive care unit (ICU) was found to be Covid positive. Subsequently, I was also diagnosed as Covid positive. I opted for hospital isolation along with my husband and 4-year-old son, all of us being positive. My investigations on admission revealed Hb: 12.5 gm%, Platelets: 190×10^3 , WBC count: 6.2×10^3 , Differential count: N66L26M5E3. Biochemistry investigations were as following: urea: 17 mg/dL, creatinine: 0.6 mg/dL, total bilirubin: 1.1 mg/dL, AST: 86 U/L, ALKP: 71 U/L, Total protein: 6.9 g/dL, albumin: 4.8 g/dL, globulin: 2.10 g/dL. I was started on oral vitamin C, zinc and azithromycin. Baseline CT scan chest revealed no

abnormality. On the fourth day after admission, I developed dyspnea on exertion with oxygen saturation 94% to 96%. I was immediately started on inj. low molecular weight heparin (LMWH), 40 mg subcutaneously once daily. Considering my past history of prolonged steroid intake and autoimmune pan uveitis, I was started on inj. Dexamethasone 6 mg IV once daily. After the second dose of steroid, I felt considerable relief. After a course of 5 days, it was decided to discontinue both LMWH and dexamethasone as I was showing very good recovery. But the very next day after discontinuation of dexamethasone, I started having high grade fever of 102°F with incapacitating weakness. Extensive fever work-up was done and all blood and urine investigations were found to be within normal limits. IL-6 value was 20.67 pg/mL (Normal: < 7pg/mL). Urine was also sent for culture and sensitivity and was later found to have no pathogenic organisms. Since no particular cause of fever could be pin pointed, steroid withdrawal was suspected and dexamethasone was restarted. The fever resolved miraculously with a rapid improvement in weakness after the second dose of dexamethasone. Dexamethasone was continued for a total of ten days and was tapered for two days before stopping completely.

Corticosteroids have been widely used for the treatment of Covid-19. Dexamethasone, 6mg IV has been recommended to be used for upto 10 days.^{1,2} Usually, Corticosteroid therapy do not need tapering when used for a short duration of 5 to 10 days.³ However, the dose and duration of steroid required

to suppress the Hypothalamic-Pituitary-Adrenal Axis (HPAA) is unpredictable.⁴ Hence, extreme caution should be taken while stopping the short term dexamethasone therapy abruptly. Also, whenever possible, tapering of the dexamethasone should always be preferred instead of abrupt termination of dexamethasone therapy irrespective of the duration and dose of treatment.

Conflict of interest

None declared by the authors.

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