Letters to the Editor

Dexamethasone pulse therapy: Evidence for no benefit in pemphigus

Sir,

I wish to refer to the paper of Pasricha and Poonam who claim that dexamathasone–cyclophosphamide pulse therapy can cure pemphigus,[1] the comment of Singh and Chaudhary who found this conclusion unacceptable since evidence was very poor due to lack of randomized controlled trials (RCT) addressing this issue,[2] the reaction of Kanwar and De who support the claim,[3] and the response of Singh, who had to defend on misquoting and personal critisism, explaining that faith is insufficient to accept such a claim.[4] The basis of the discussion is that Pasricha and his followers do not feel the need to perform an RCT on pulse therapy on pemphigus since it works in their experience and in different centers in India.[1,3]

What surprises me is that all authors missed the RCT on dexamethasone pulse therapy in pemphigus published by my group in 2006 in the *Archives of Dermatology*.[5] In this double blind, randomized, placebo-controlled trial, we compared oral dexamethasone in 300-mg pulses (D/A) or placebo pulses (P/A) three days per month for one year in 20 pemphigus vulgaris patients. During the intervention, the D/A and P/A groups received conventional treatment with prednisolone, 80 mg/d, which was quickly tapered across 19 weeks, and azathioprine sodium, 3 mg/kg per day, until the end of the study. Monthly pulses were continued until prednisolone treatment was tapered to 0 mg. We found that eight of the 11 D/A-treated patients and all 9 P/A-treated patients achieved remission. Mean time to remission was 173 days with D/A and 176 days with P/A. The mean duration of remission within the first year was 151 days for D/A and 141 days for P/A. Mean cumulative prednisolone dose after one year was 5300 mg for D/A and 4882 mg for P/A. We found no statistically significant difference ($P>.05$) of an adjuvant effect of dexamethasone pulse therapy on remission of pemphigus vulgaris on top of what was achieved with prednisolone with azathioprine alone.

The results of this randomized controlled trial cannot directly be compared with those of the open patient series of Pasricha and Poonam in which dexamethasone was given intravenously in 100 mg doses. However, the bioavailability of 300 mg oral dexamethasone is equivalent to 168 mg given intravenously.[6] Pasricha also combined dexamethasone pulses with cyclophosphamide (D/C). In D/C therapy, patients receive 500 mg of cyclophosphamide intravenously on the second pulse day, and daily oral cyclophosphamide, 50 mg/d with "adequate daily oral dose of betamethasone".[1] We did not continue the pulses for nine months after remission (phase II), but monitored the patients until one year after start of therapy for diseases free period and steroid intake. One could still claim that the combination of dexamethasone with cyclophosphamide may be doing the trick. However, we provided a steroid sparing agent, azathioprine, in high dose for the complete period of the trial, to give the pulse therapy a level playing field for comparison to placebo that was found a prerequisite condition by Singh and Chaudhary.[2] Moreover, in a randomized controlled open-label trial in pemphigus vulgaris by Chams-Davatchi *et al*,[7] azathioprine appeared as more effective to reduce steroid dosage than cyclophosphamide.

Taken all together, I conclude that in patients with new pemphigus vulgaris disease activity, there is some evidence that dexamethasone pulse therapy has no benefit in addition to daily oral corticosteroids with azathioprine. The Indian collegues need to perform RCTs to convince the scientific world of their claim on dexamethasone–cyclophosphamide pulse therapy in pemphigus.

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