

Poster presentation

## Pulse steroid therapy in acute airway obstruction in relapsing polychondritis

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Relapsing polychondritis (RP) is a rare disease characterized by recurrent inflammation and destruction of cartilaginous structures and connective tissue. Extensive organ involvement can be seen. It is a generally progressive disease commonly involving the respiratory tract (>50%) and airway involvement is a major cause of death in RP.

We report a case of a 58-year old man diagnosed with RP in accordance with the modified diagnostic criteria of Damiani and Levine, whose clinical features included a severe respiratory tract chondritis. He was initially treated with NSAID and intramuscular methylprednisolone. Four weeks later a lack of response to the treatment and progressive respiratory involvement resulted in shifting him to oral prednisone (40–60 mg/daily) and gradual weekly reduction was planned, until a tapering dose could be reached. The patient however continued to have severe intermittent exacerbations of respiratory distress and was shortly hereafter hospitalized. Conventional therapy had little effect. Methotrexate was instituted and intravenous methylprednisolone pulse therapy (500 mg/daily) was given over a period of 3 days. The patients respiratory symptoms ameliorated remarkably rapidly and the patient continued the lower dose prednisone and methotrexate. No short term adverse reactions due to the pulse therapy were observed. Referral was made for an elective placement of a tracheo-bronchial stent due to the extensive airway involvement.

Pulse steroid therapy is a concept with a high daily dose of intravenous steroids over a short span of time (usually 1–5 days) and several regimens have been described. Doses

of each pulse are not standardized but are usually 5–20 mg/kg for methylprednisolone (250–1000 mg). In most indications it is usually accompanied by continuous administration of lower dose steroids and immunosuppressive agents.

Pulse steroid therapy has been reported successful in treating patients with severe manifestations, where rapid immunosuppression and anti-inflammatory effect is desired. In RP it may especially be helpful in acute airway obstruction and may allow stent placement (or tracheotomy) to be performed electively. Although it is considered cumulatively less toxic than sustained low dose steroid therapy significant adverse reactions may still occur. It should therefore be used in selected cases under careful monitoring.