



## Correspondence

## Interferon alpha might be an alternative therapeutic choice for refractory Neuro-Behçet's disease



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To the editor,

We read with great interest the article written by London et al. (2018). This paper is very important to reveal the clinicians' despair in the face of refractory cases with parenchymal Neuro-Behçet's Disease (pNBD). Corticosteroids, azathioprine, IL-6 receptor blocking agent (tocilizumab) and TNF inhibitors (TNFi) are suggested options for neurological disease in current BD treatment recommendations (Hatemi et al., 2018). Unfortunately, in this case, neurological disease couldn't be controlled despite these therapies. We want to bring to mind that interferon-alpha (IFN- $\alpha$ ) may be an alternative for treatment of refractory pNBD, through this case.

IFN- $\alpha$  is a glycoprotein which has antiviral, antitumor and immunomodulatory actions. It was applied systemic treatment of Behçet's disease (BD) for the first time in 1986 (Tsambaos et al., 1986). Since that time, it has been used widely and successfully for treatment of BD uveitis. Neurological involvement has lower prevalence than uveitis in BD. Therefore, knowledge about INF- $\alpha$  usage in pNBD is limited to case reports and series. However, it is an available choice in treatment of pNBD (Monastirli et al., 2010; Nichols et al., 2001). Moreover, Calguneri et al. reported that INF- $\alpha$  can be used in refractory NBD and it can even be combined with cyclophosphamide (Calguneri et al., 2005, 2003).

Flu-like symptoms, injection site reactions, mild leukopenia, asymptomatic elevated liver enzymes and thyroid function disorders are common side-effects for IFN- $\alpha$ . They aren't more severe than for other immunosuppressives (Yang et al., 2008). It can be well-tolerated and effective in pediatric pNBD patients as well as adults (Kuemmerle-Deschner et al., 2008). Unlike the other biologics, INF- $\alpha$  doesn't cause an increased risk for infections (Imrie and Dick, 2007). Particularly, this data may be important for severe pNBD which is associated with an increased risk of infection depending on neurological disabilities such as aspiration pneumonia. Furthermore, other biologics have generally higher cost than IFN- $\alpha$ . Hereby, we consider IFN- $\alpha$  is an alternative option for refractory pNBD.

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