

Interferon Alpha-2a Treatment for Refractory Behcet Uveitis in Korean Patients

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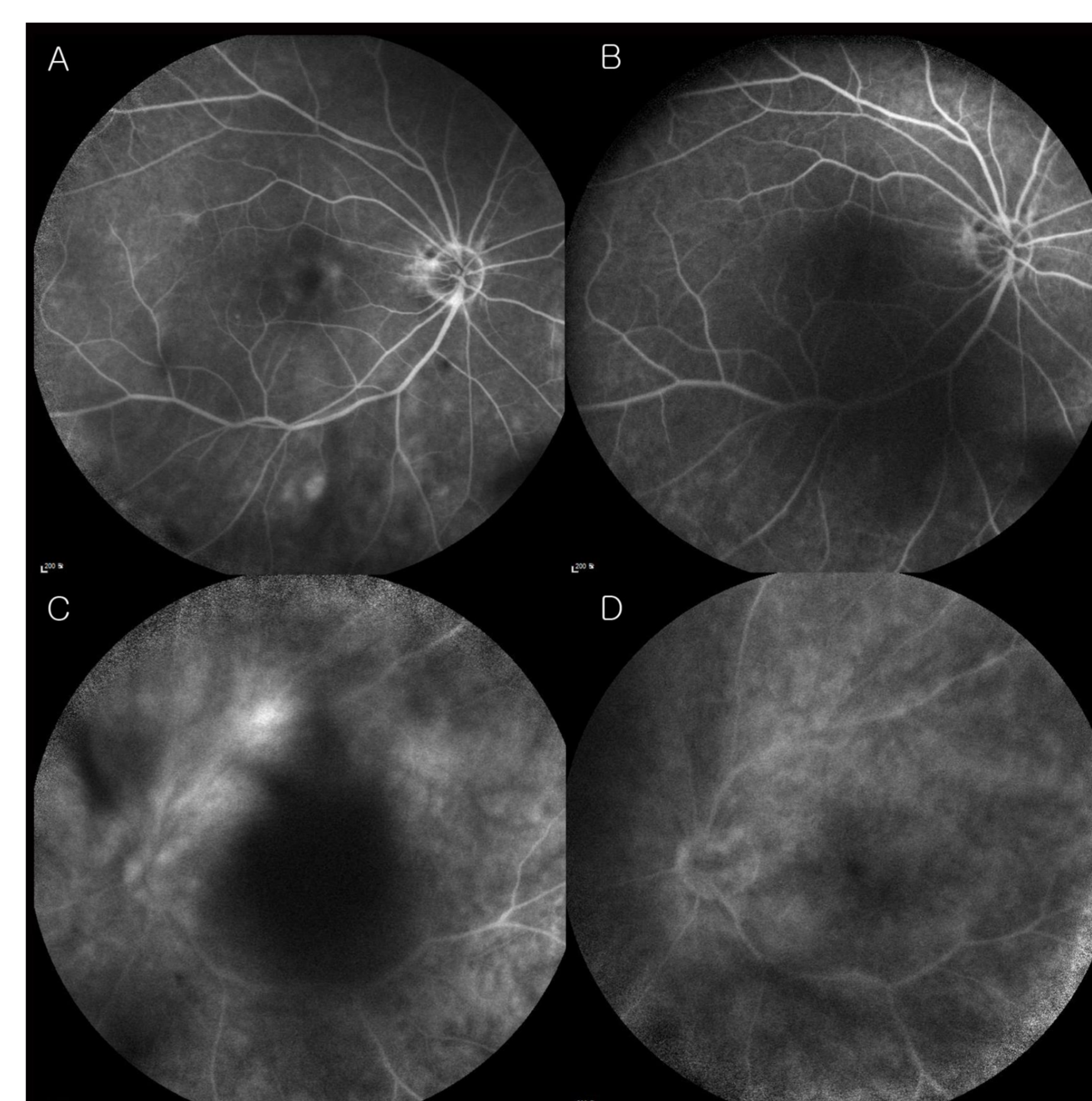
Background:

Interferon alpha-2a (IFN α 2a) has been reported to be effective and safe in refractory cases, although the optimal regimen has not yet been established. In this study, we aimed to evaluate therapeutic outcomes of interferon alpha-2a (IFN α 2a) treatment in patients with Behcet's disease who were refractory to immunosuppressive agents.

Patients & Methods: This retrospective, interventional case series reviewed the medical records of 5 patients with refractory Behcet uveitis from January 2011 to February 2017. IFN α 2a was administered at a dose of 300 million IU 3 times per week. Clinical response, relapse rate, and change of visual acuity were evaluated.

Results:

	Patient 1	Patient 2	Patient 3	Patient 4	Patient 5
Age at onset (years)	23	43	23	32	39
Duration of IFN α 2a treatment (months)	6	5	28	12	2
Follow-up period (months)	51	27	34	72	110
Laterality	Bilateral	Unilateral	Bilateral	Bilateral	Bilateral
Type of BD	Incomplete	Incomplete	Incomplete	Incomplete	Incomplete
Extraocular manifestations of BD	Oral ulcer CNS involvement Epididymitis Arthritis Skin lesion (EN)	Oral ulcer GI involvement	Oral ulcer Skin lesion (folliculitis) GI involvement	Oral ulcer Skin lesion (EN)	Oral ulcer
Previous immunosuppressive treatment	Azathioprine 100mg/d, Methotrexate 17.5mg weekly	Cyclosporine 200mg/d	Cyclosporine 200mg/d	Mycophenolate mofetil 2g/d	Mycophenolate mofetil 2g/d
Relapse rate (number of uveitis attacks/year), preTx→postTx	2.13→2	1.64→0	4.00→0	1.80→0	1.22→0
Response to IFN α 2a	No	Yes	Yes	Yes	Yes
Adverse events	Flu-like Sx Depression	Flu-like Sx	Flu-like Sx	Flu-like Sx	Flu-like Sx



Figures: Fluorescein angiographic images of patients with refractory Behcet uveitis. In patient 4, diffuse capillary leakage (A) decreased 6 months after interferon alpha-2a (IFN α 2a) therapy (B). In patient 3, moderate vasculitis at the superior arcade (C) was significantly resolved 17 months after the initiation of IFN α 2a treatment (D).

Therapy and Outcome:

- Four of the 5 patients (80%) presented with responses to IFN α 2a without any uveitis attack during the treatment period.
- The mean number of uveitis attacks/year per patient during the treatment was 0.40 ± 0.89 .
- The mean log of the Minimum Angle of Resolution visual acuity improved from 1.44 ± 0.38 at baseline to 1.02 ± 0.58 at the final follow up. Visual acuity improved in all patients.
- Although the baseline BCVA was 20/200 or less in all patients (100%), but the final BCVA of 20/200 or less were observed in 2 patients (40%).

Comments:

- All patients experienced flu-like symptoms at the beginning of IFN α 2a treatment.
- One patient presented with mild depression, which was relieved by antidepressant medication.
- No other significant adverse effects were observed during the treatment period.

Conclusions:

- IFN α 2a is an effective therapy for Behcet uveitis refractory to conventional immunosuppressants in Korean patients.