

Tocilizumab for the treatment of Behçet uveitis that failed interferon alpha and anti-tumor necrosis factor-alpha therapy

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Financial interests: The authors have no financial interest in any of the materials discussed in this presentation.

Background:

- Behçet uveitis (BU) is a multisystem inflammatory disorder characterized by recurrent inflammatory attacks.
- Immunomodulatory therapy is essential for the management of BU.
- In case of failure or intolerance of current therapeutic options including:
 - Corticosteroids,
 - Azathioprine (AZA),
 - Cyclosporine (CSA),
 - Interferon alpha (IFN α)
 - Anti-tumor necrosis factor-alpha (TNF- α)
- Alternative biologic agents may be needed such as interleukin (IL)-6 inhibitor tocilizumab (TCZ).

Patients & Methods:

- A retrospective case series of 5 patients with refractory BU
- Indications:
 - Ongoing inflammation in 3 patients
 - Infusion reaction with infliximab in 2 patients
- Outcome measurements:
 - Visual acuity (VA)
 - Anterior chamber cell (ACC)
 - Vitreous haze
 - Laser flare meter (LFM) readings
 - Central macular thickness (CMT)
 - Fluorescein angiography (FA) score.
- Side effects were recorded.

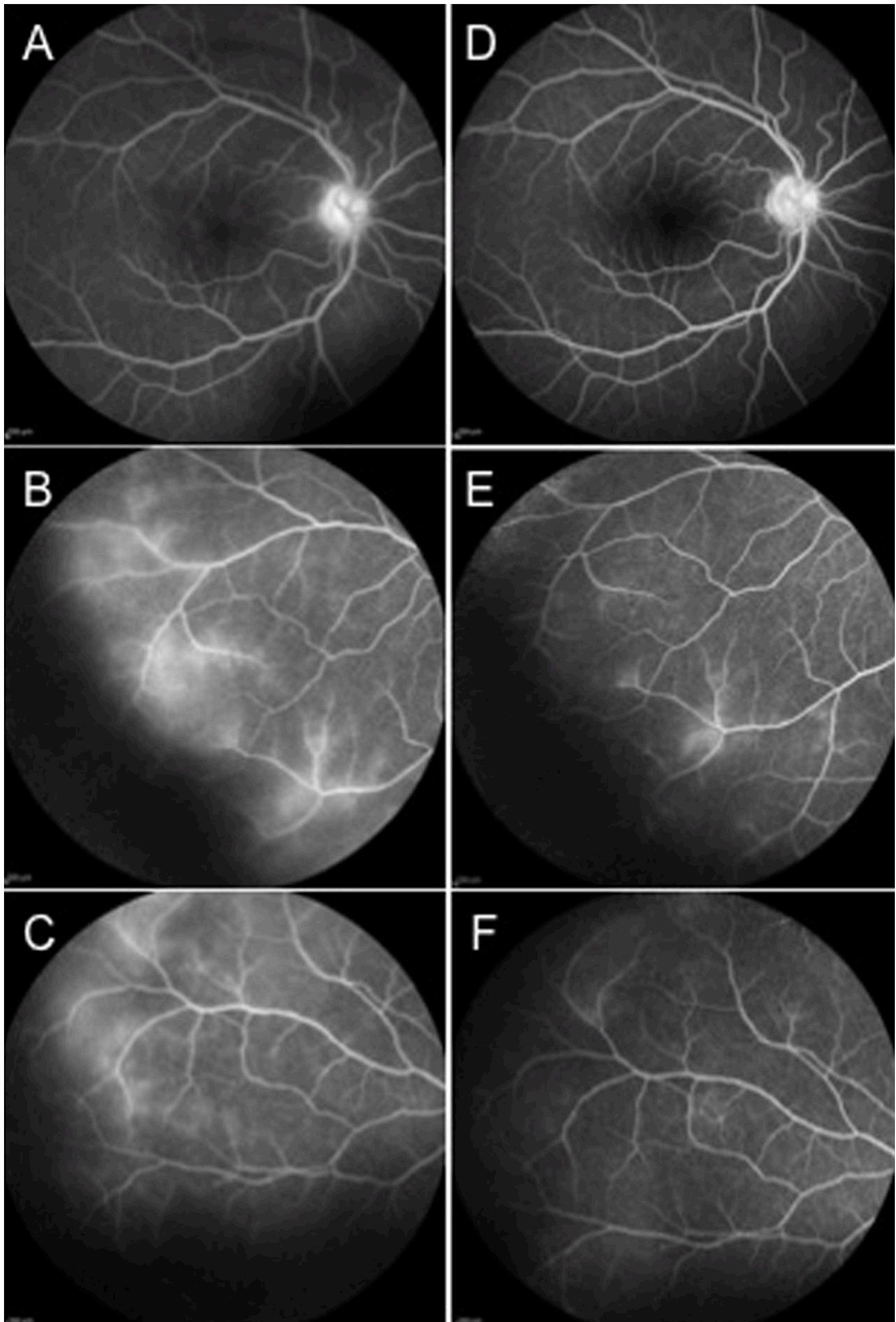
Patient no	Age at presentation	Gender	Previous treatment	Duration of previous treatment (years)	TCZ duration (months)	Concurrent medication (mg/day)	Side effects
1	24	F	CS, AZA, IFN, IFX	2	8	AZA (100)	None
2	27	M	CS, AZA, CSA, IFN, ADA, IFX	7	19	CSA (150)	None
3	21	F	CS, AZA, IFN, IFX	2	14	CS (5)	Slightly elevated cholesterol level
4	29	M	CS, AZA, CSA, IFN, IFX	8	7	AZA (100) CS (5)	None
5	26	F	CS, AZA, CSA, IFN, ADA, IFX, MMF	3	5	CS (5)	None

CS= Corticosteroid, AZA= Azathioprine, CSA= Cyclosporine, IFN= Interferon, IFX= Infliximab, ADA= Adalimumab, MMF= Mycophenolate Mofetil, TCZ= Tocilizumab,

Therapy and Outcome:

- 8mg/kg/month TCZ infusion
- Intravitreal dexamethasone implant was administered as bridging therapy in 2 patients.
- VA retained or improved in all patients.
- ACC and vitreous haze decreased to 0 if it was present.

Figures of patient 2:
Before TCZ treatment (A,B,C) and after 19 months (D,E,F).



	Mean LFM readings (ph/ms)	Mean CMT (μ m)	Mean FA score
Before TCZ	15.4 \pm 2.7	324.7 \pm 36.6	20.6 \pm 5.4
After 3 rd TCZ	7.5 \pm 4.0	311.8 \pm 60.6	15.8 \pm 2.2
Final visit	5.0 \pm 0.9	280.2 \pm 34.1	9.3 \pm 4.5

LFM= Laser flare meter, CMT= Central macular thickness, FA= Fluorescein angiography, ph/ ms= photon/millisecond

Conclusions:

- In refractory BU, TCZ may be an effective and safe therapeutic option.
- TCZ also seems effective on uveitic macular edema.

Comments:

- Further prospective and controlled studies are needed to validate safety and efficacy of TCZ.