Association between Multiple Sclerosis and Fuchs' Heterochromic Iridocyclitis



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BACKGROUND

Fuchs' heterochromic iridocyclitis (FHI) is a chronic, low-grade inflammation of the anterior uvea and vitreous. Major clinical features include little or no ciliary injection or pain, small to medium-sized (stellate) keratic precipitates involving the whole endothelial surface, diffuse iris stromal atrophy with or without heterochromia, vitreous opacities, and absence of posterior synechiae. Up to 10% of patients have bilateral involvement. Several infectious agents have been reported in association with FHI, such as Toxoplasma gondii, herpes simplex virus, cytomegalovirus and the most recently rubella virus. Multiple sclerosis (MS) is a demyelinating disease of the central nervous system. Ocular manifestations include optic neuritis, internuclear ophthalmoplegia, nystagmus, retinal vasculitis and intermediate uveitis.

The aim of our study was to report the association of multiple sclerosis with Fuchs' heterochromic iridocyclitis.

PATIENTS AND METHODS

- A retrospective study
- Medical records of 2642 patients from our Centre for diagnosis and treatment of uveitis (in years 2003-2016) were analyzed focusing on MS and FHI.

RESULTS

- Uveitis associated with MS was diagnosed in 78 patients (3.0 %): anterior uveitis (6), intermediate uveitis (20), retinal vasculitis (21) and panuveitis (31).
- 218 out of 2642 patients had FHI. Bilateral form of FHI was diagnosed in 24 cases.
- The clinical examination revealed signs of FHI in the anterior segment in 8 out of 78 cases with MS.

No/sex/ date of birth1	Dg. of FHI (age)	Dg. of MS (age)	laterality	atypical features of FHI	reason for neurological examination
1/M/1953	22	22	OD	none	optic neuritis
2/F/1981	20	21	ODS	none	paraesthesia
3/F/1951	35	43	OS	none	motor deficits
4/F/1959	41	42	OS	vasculitis	screening of etiology of retinal vasculitis
5/M/1971	18	33	ODS	vasculitis	screening of etiology of retinal vasculitis, paraesthesia
6/F/1979	28	28	OD	snow balls	screening of etiology of presumed intermediate uveitis
7/F/1965	47	39	OD	none	the diagnosis of MS preceded the diagnosis of FHI
8/F/1979	36	23	OD	none	the diagnosis of MS preceded the diagnosis of FHI

Figure: Patient No 4 - heterochromia of iris





Figure: Patient No 5 - vasculitis



CONCLUSIONS

- We revealed clinical signs of FHI in 10.3 % of cases of uveitis associated with MS.
- This association has not yet been reported.
- We recommend to ask patients with FHI about a history of sensitive, sensory and motor deficits, and to consider MRI scan of the brain.
- Our observation might induce more research in this field.

Literature

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