White dot syndromes: A report of 45 cases from Tunisia

Emna Regai, Rim Kahloun, Imen Ksiaa, Hajer Ben Amor, Sonia Zaouali, Bechir Jelliti, Moncef Khairallah

Department of Ophthalmology, Fattouma Bourguiba University Hospital,

Faculty of Medicine, University of Monastir-TUNISIA

Financial interests: none

14th Congress of the International Ocular Inflammation Society (IOIS) & The 4th International Assembly of Ocular Inflammation Societies

Background:

- White dot syndromes are primary inflammatory choriocapillaropathies of unknown etiology in which the common denominator is choriocapillaris non perfusion and secondary ischaemia of the outer retina.
- **Purpose** : to report epidemiology, clinical features and outcomes of white dots syndromes (WDS) in Tunisia, North Africa.

Patients & Methods: Retrospective study including 45 patients with WDS diagnosed and managed at the department of Ophthalmology, Fattouma Bourguiba University Hospital, Monastir, Tunisia between January 2000 and April 2017. Mean follow-up was 2.43 years (15 days, 16 years).

Results:

- Mean age: 34.76 years (18, 64).
- WDS entities identified are presented in the table below
- All entities had female preponderance except serpiginous choroiditis.
- Both MEWDS and AMNR generally carried a good visual prognosis.
- The worst visual outcome was recorded in patients with multifocal choroiditis, Birdshot chorioretinopathy and serpiginous choroiditis.

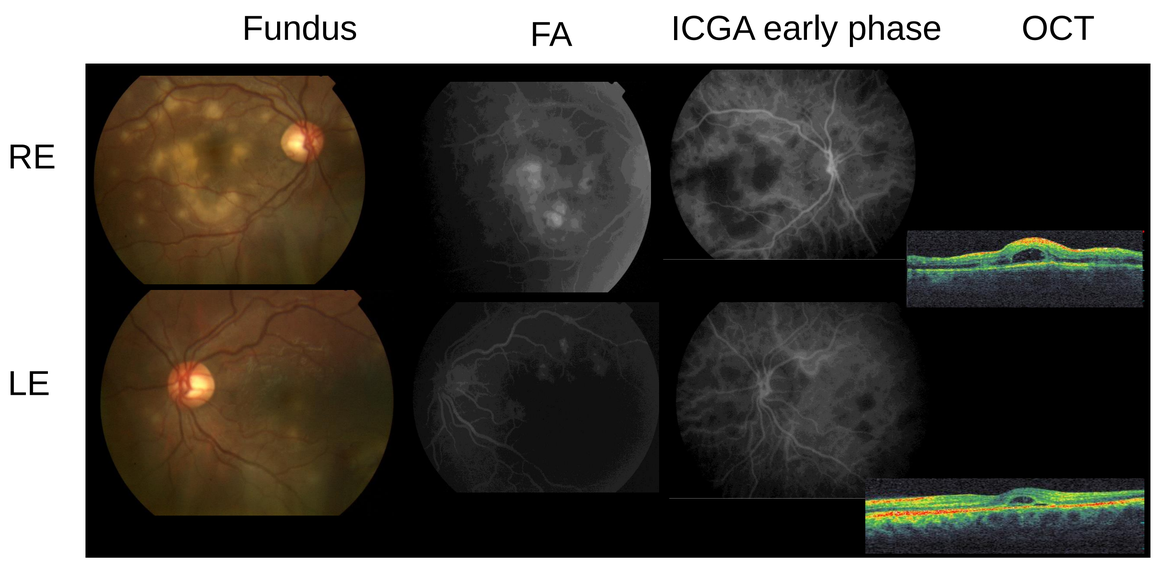
Table 1: White dot syndromes from a referral center in Tunisia

Entities	Patient (N= 45)/(%)	Mean age	Sex ratio (male/female)	Mean initial visual acuity	Mean final visual acuity
MEWDS	13 patients (28.9%)	25.62 (20 – 39)	0.18	20/50	20/20
Birdshot chorioretinopathy	6 patients (13.3%)	51 (40-64)	0.5	20/50	20/100
Serpiginous choroiditis	6 patients (13.3%)	50.8 (40 - 63)	2	20/63	20/50
Punctate inner choroidopathy	7 patients (15.5%)	31.5 (21-42)	0.16	20/63	20/63
Idiopathic multifocal choroiditis	6 patients (13.3%)	36.5 (18 - 54)	0.5	20/63	20/100
Acute posterior multifocal placoid pigment epitheliopathy (APMPPE)	5 patients (11.1%)	22 (19 – 27)	2	20/50	20/25
Acute macular neuroretinopathy (AMNR)	2 patients (4.4%)	22.5 (19 - 26)	0/2	20/25	20/20

Representative cases:

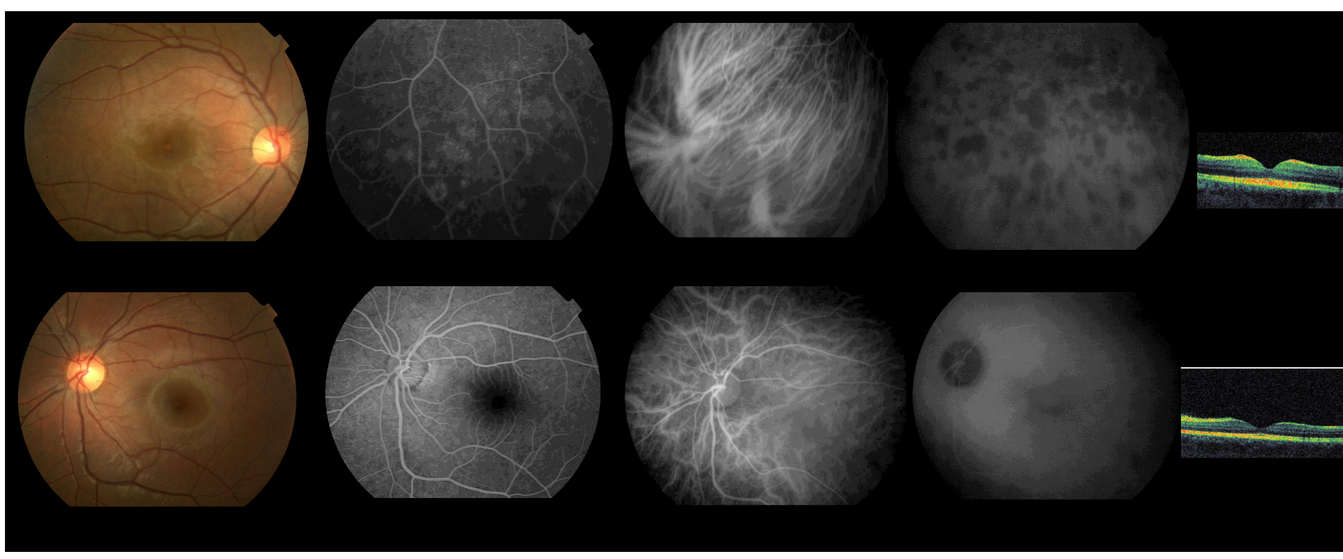
Case 1: Acute posterior multifocal placoid pigment epitheliopathy (APMPPE)

A 20 year-old man complained of vision loss RE. On examination, anterior segment was normal.



Case 2: MEWDS

A 20 year-old woman complained of vision loss RE. On examination, anterior segment was normal.



Comments and conclusion:

- WDS are characterized by the presence of whitish or yellowish fundus lesions which vary in shape, size, and location, and at times are associated with uveitis in the anterior segment and/or the vitreous body
- They cover a large number of entities that typically affect young, healthy adults.
- An array of WDS was observed in our referral center in Tunisia. The most common entities include MEWDS, multifocal choroiditis, Birdshot chorioretinopathy, serpiginous choroiditis, punctate inner choroidopathy and APMPP
- Prognosis mainly depends on the type clinical entity.