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Original Research Article

Intermediate Uveitis: Epidemiological and Etiological Profile of 40 Cases

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Abstract: Intermediate uveitis is a relatively infrequent pathology. No predominance of age, sex, or race. Etiologies are dominated by mainly bacterial and inflammatory infectious causes, especially sarcoidosis, Behcet, and MS. The diagnosis is mainly clinical; paraclinical is an element of etiological orientation and severity. The prognosis is relatively good apart from the signs of severity represented by the macular, papillary, vasculitis, retinal detachment, and secondary glaucoma. In addition to etiological treatment, symptomatic treatment is based on corticotherapy or immunosuppressed by a general route if bilateral or intravitreal or a Sub-Tenon anesthesia route if unilateral involvement.

Keywords: Intermediate uveitis, Epidemiological and Etiological Profile.

INTRODUCTION

The International Uveitis Study Group defines intermediate uveitis as inflammation of the ciliary and the anterior retina with the vitreous (SUN) as the main site [1].

They are most often idiopathic in more than 2/3 cases, but can sometimes be associated with general pathologies.

In this work, we report the epidemiological, clinical, and therapeutic profile of a series of patients with intermediate uveitis.

TABLE 1. The SUN* Working Group Anatomic Classification of Uveitis

Type	Primary Site of Inflammation†	Includes
Anterior uveitis	Anterior chamber	Iritis
		Iridocyclitis
		Anterior cyclitis
Intermediate uveitis	Vitreous	Pars planitis
		Posterior cyclitis
		Hyalitis
Posterior uveitis	Retina or choroid	Focal, multifocal, or diffuse choroiditis
		Chorioretinitis
		Retinochoroiditis
		Retinitis
		Neuroretinitis
Panuveitis	Anterior chamber, vitreous, and retina or choroid	

*SUN = Standardization of uveitis nomenclature.
†As determined clinically. Adapted from the International Uveitis Study Group anatomic classification in reference 1.

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MATERIAL AND METHODS

This is a retrospective monocentric study of a cohort of 30 patients (40 eyes) with intermediate uveitis collected between 2015 and 2022, within the ophthalmology department of the KHENIFRA provincial hospital.

The diagnosis of intermediate uveitis has been selected according to the definition set out by the International Uveitis Study Group. All patients had a complete exam + baseline assessment guided by the clinical context and exam data.

We have achieved in all our patients:

Rigorous interrogation including Age, Sex, Ocular, and Extraocular FS, Antecedents.

Best Corrected visual acuity, slit lamp, eye strain, Fundus.

- **General examination:** (internist).
- **Basic paraclinical assessment:** Biology + Lung Radio + Angiography and OCT ultrasound.
- **Clinical Context:** Based Assessment.

RESULTS

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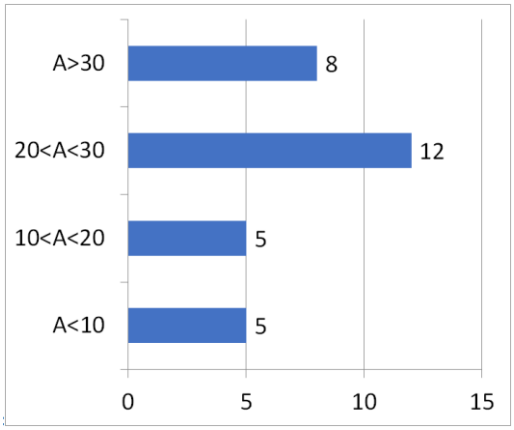
- **Basic paraclinical assessment:** Biology + Lung Radio + Angiography and OCT ultrasound.
- **Clinical Context:** Based Assessment.
- **Sex-ratio M/F:** 1.2

The average of age is 36 years [4 to 68years].

Unilateral infringement in 67% of cases:



Age distribution

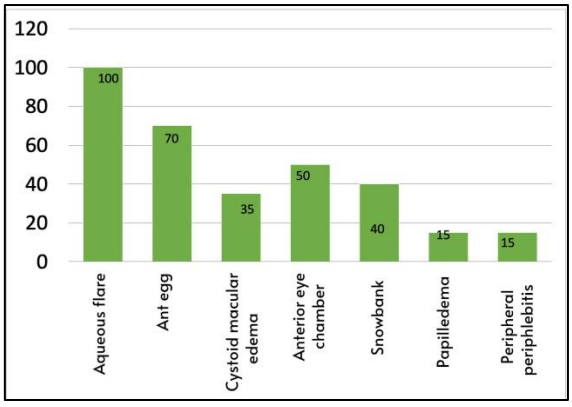
Initial VA

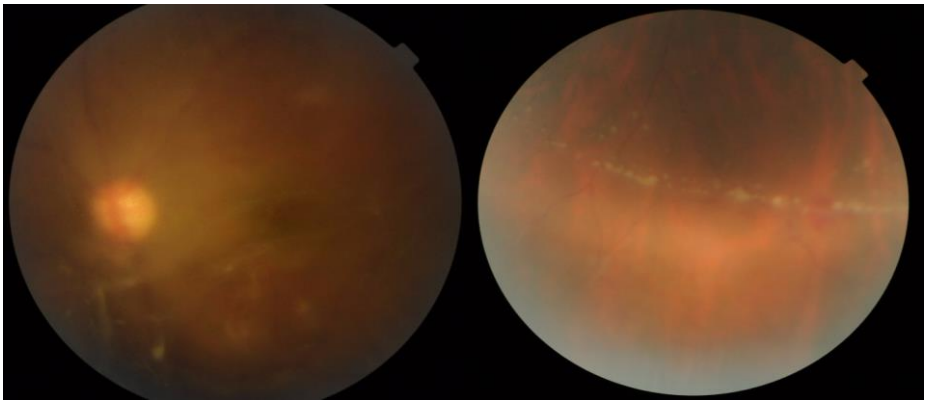
VA<1/10	1/10<VA<5/10	VA>5/10
60% (18 cases)	25% (8 cases)	15% (4 cases)

Reason for Consultation

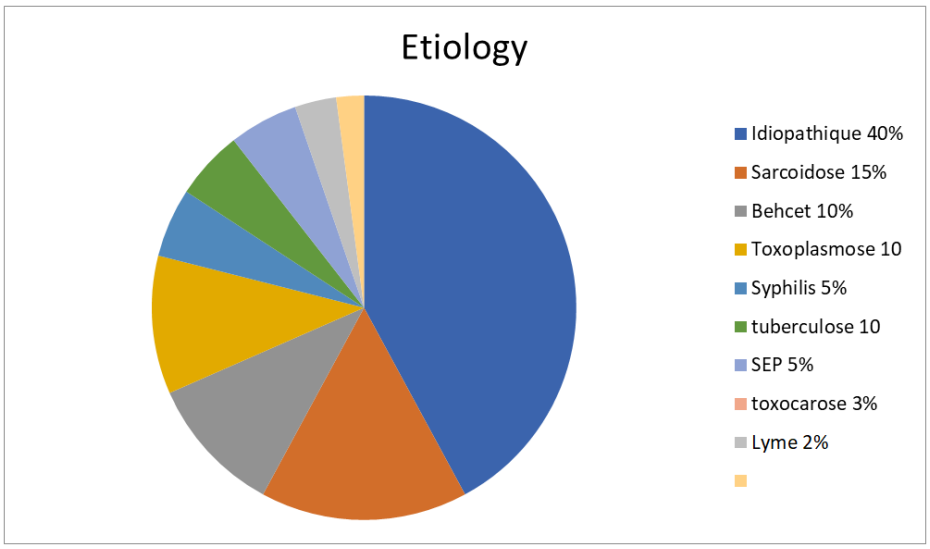
- **Decreased visual acuity:** 85%
- **Pain:** 50%
- **Redness:** 60%
- **Highly symptomatic vitreous floaters:** 70%
- **Cloudy vision:** 15%
- **Photophobia + tearing:** 20%

Physical Signs





Hyalite **Aunt Egg**



Treatment

- **Corticosteroid treatment:** 100% cases
- **Immunosuppressant:** 30% cases
- **A specific etiological treatment:** 50%

	Peribulbar anaesthesia CTC	**Bolus CTC**	**Oral CTC**
Unilateral, 20 cases	50%, 10 cases	25%, 5 cases	25%
Bilateral, 10 cases	_	100%	100%

	Bolus CTC	**Oral CTC**	**Peribulbar anaesthesia ctc**	**IS**	**other**
Idiopathic	50%	50%	50%	-	-
sarcoidosis	75%	75%	25%	25%	-
Behcet	100%	100%	-	50%	-
Toxoplasmosis	50%	50%	50%	-	Antiparasitic
Syphilis	60%	60%	40%	-	Peni G
Tuberculosis	100%	100%	-	-	antibacillaire
MS	100%	100%	-	40%	-
Toxocara	100%	100%	-	-	Antiparasitic
Lyme	100%	100%	-	-	C3G

Evolution

- Final VA

VA > 5/10	**1/10<VA<5/10**	**VA < 1/10**
50% cases	30 %	20%

- Complications

Evolution Complications (%)	initial	5 year follow-up
OMC	35	40
Cataract	20	50
DDR	0	15
Secondary glaucoma	0	20

DISCUSSION

It emerges from our work that there is a slight male predominance in young adults, with usually unilateral impairment and low initial visual acuity.

In our series the etiologies are dominated by the sarcoidosis triad, Behçet disease, toxoplasmosis although the first is found in the literature, Morocco's situation as a Mediterranean country means that Behçet's disease is frequently found in our series.

The visual prognosis is generally good since 50% of patients recover a visual acuity greater than 5/10. The presence of WTO, cataract, DDR and secondary glaucoma are predictive factors of poor visual recovery, however, adequate medical and surgical management can improve this prognosis in the long term.

Selon les données de la literature

- Prevalence and incidence of IU: 4% to 20% of uveitis.
- No predilection for gender, age or race.

	Age	Sexe ratio	bilatérality
S Parchand *et al.*,	34years	0.6	60%
Our Serie	36 years	1.2	33%

- Functional signs: myodisopsia, blurred vision and progressive installation BAV Signes physics: hyalitis: cell reaction and protein tyndall.
- The «ant eggs», pack ice characterizes the plan.
- Other signs: OM, periphlebitis, papillary edema.
- Most IUs are idiopathic.
- The most common etiologies in the literature are sarcoidosis, MS, tuberculosis, behcet, syphilis, lyme>.
- In the series S Parchand *et al.*,*: tuberculosis 46%, sarcoidosis 18% cases.

In our Series

Predominance of the sarcoidosis group, Bechet's disease, tuberculosis, toxoplasmosis, MS and syphilis

Morocco's situation as a Mediterranean country means that Bechet's disease is frequently found in our series.

Similarly its epidemiological situation of TB endemic countries highlights head tuberculosis from etiologies

An association with a particular immunogenetic field was demonstrated: HLA DR2, HLA A28, HLA DR15.

Treatment:

- Corticosteroid therapy ++
- Oral: 80 to 100 mg/d.
- Methyl-prenisolone bolus (PM) 500mg at 1g/d and 3d followed by relay per 1mg/kg/d with
- Slow degression over minimum 6 months.
- Peribulbar injections: triamcinolone retard [Kenacort 40 mg].
- Intravitreal injection of triamcinolone 4 mg.
- Topical corticotherapy hourly then degression if previous participation.

Immunosuppressants:

- In case of cortico dependence, resistance, recurrence or side effects.
- In 20% of our patients.
- Azathioprine (Imurel): in 3 patients, Behcet's disease, sarcoidosis and MS.
- Cyclosporine A: 1 child with Behçet.
- Ciclophosphamide in a patient

Other:

- Antibacillae.
- Antibiotic [peni G, cephalosporine 3 generation].
- Antiparasitic.

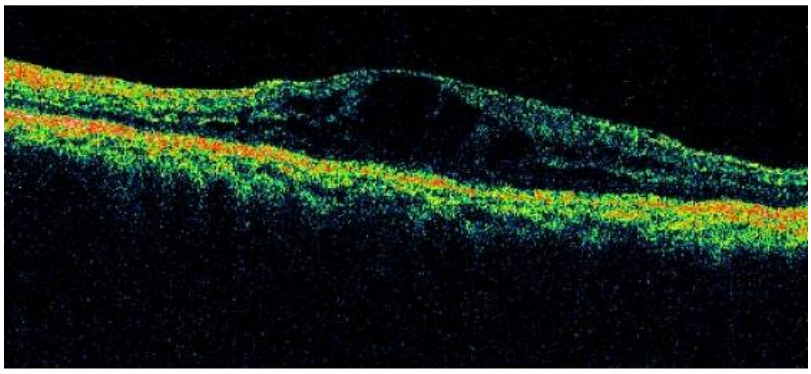
C. Turpin, M. Weber. EMC Ophtalmology 2010
Le pronostic est plutôt, favorable puisque 50% des patients ont récupéré une AV > 5/10

C'est l'atteinte maculaire œdémateuse qui conditionne le prognostic.

30% des patients qui ont gardé une AV<1/10 après une durée de suivie de 5 ans ont un OM.

10% des patients presentant un Oedeme papillaire ont évoluer vers la chronicité avec atrophie optique.

10% des patient's ont presente une attiente retinienne representée soit par un decollement de retine, une membrane epimaculaire ou vascularite avec ischemie.



The presence of WTO, cataract and WILD is a predictor of poor visual recovery; adequate medical and surgical management can improve this prognosis in the long term.

CONCLUSION

No sexual predilection or race.

Etiologies dominated by sarcoidosis, Behçet disease, tuberculosis, syphilis and MS.

The results suggest that comprehensive assessment and careful follow-up of these patients significantly improves the diagnosis of associated diseases.

An adapted and precocious JEP allows in the majority of cases a remarkable functional improvement as well as a favorable clinical evolution.

Prognosis depends mainly on WTO and DDR.

The OCT currently allows us to diagnose OM early.

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