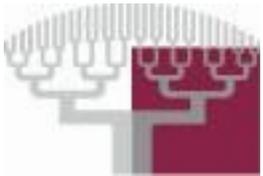


Cas cliniques

UNIVERSITÉ
PARIS DESCARTES



ASSISTANCE
PUBLIQUE  HÔPITAUX
DE PARIS



HÔPITAUX UNIVERSITAIRES
PARIS CENTRE

Antoine Brézin

♂ □ 16 ans

Pas d'antécédent médical

Né à terme de parents non consanguins

Pas d'antécédent familial ophtalmologique notable

Symptômes visuels depuis 3 semaines

Sensation d'amputation du champ visuel périphérique, du côté gauche, puis bilatérale.

Puis, baisse d'acuité visuelle bilatérale - 5/10^e ODG le 29 OCT 2019

Analyse de champ unique

Oeil: Gauche

Nom: ID: DDN: 31-10-2003

Test de seuil central 30-2

Contrôle de fixation: ARRET
Cible de fixation: Central
Pertes de fixation: 0/0
Erreurs faux pos.: 0 %
Erreurs faux nég.: Sans objet
Durée du test: 05:14

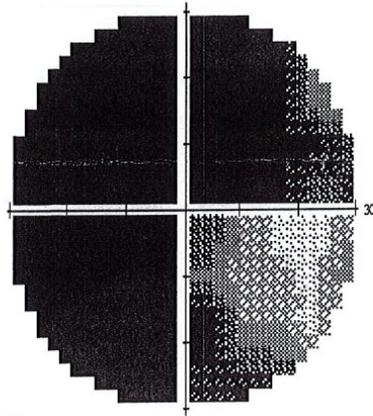
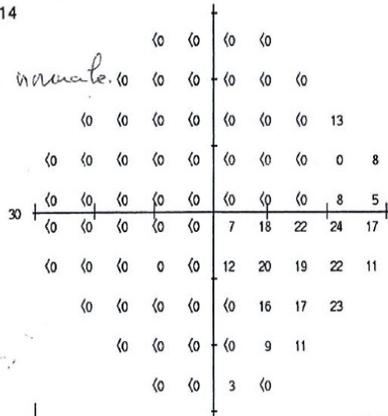
Stimulus: III, Blanc
Fond: 31.5 ASB
Stratégie: SITA-Fast

Diamètre de la pupille:
Acuité visuelle:
RX: DS DC X

Date: 21-10-2019
Heure: 07:53
Age: 15

Fovea: 29 dB

à la normale.

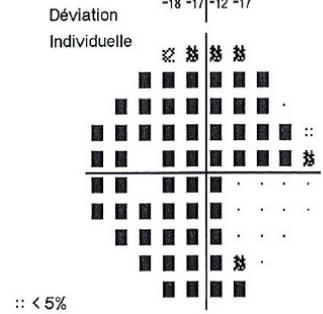
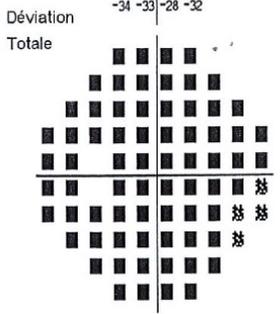


-30	-30	-30	-31
-32	-32	-32	-33
-33	-33	-34	-34
-34	-34	-35	-35
-34	-34	-36	-37
-34	-34	-36	-37
-34	-34	-35	-34
-34	-34	-35	-34
-34	-34	-35	-35
-34	-34	-34	-34
-34	-33	-28	-32

-14	-15	-15
-16	-16	-17
-18	-18	-18
-19	-19	-20
-18	-19	-21
-18	-19	-21
-18	-19	-20
-19	-19	-20
-19	-19	-19
-18	-17	-17

THG
Hors limites normales

MD -29.52 dB P < 0.5%
PSD 9.60 dB P < 0.5%



∴ < 5%
⊗ < 2%
⊗ < 1%
■ < 0.5%

CABINET D ORTHOPTIE YAZALI
AV ALLAL EL FASSI IMM ALLOUMAIRI
TEL 044-31-16-49

Analyse de champ unique

Oeil: Droit

Nom: I ID: DDN: 31-10-2003

Test de seuil central 30-2

Contrôle de fixation: ARRET
Cible de fixation: Central
Pertes de fixation: 0/0
Erreurs faux pos.: 0 %
Erreurs faux nég.: Sans objet
Durée du test: 05:00

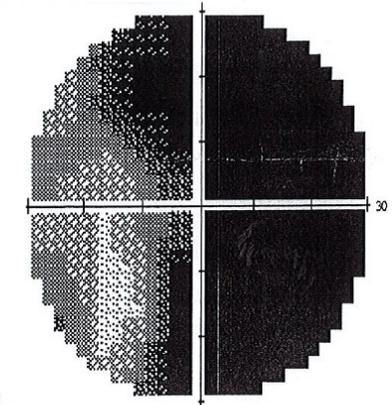
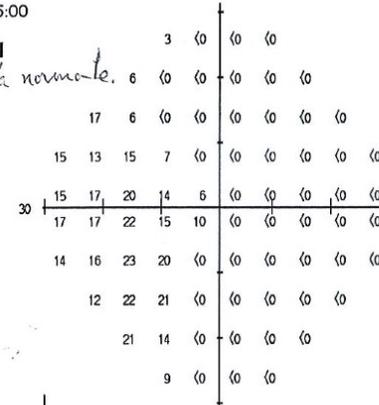
Stimulus: III, Blanc
Fond: 31.5 ASB
Stratégie: SITA-Fast

Diamètre de la pupille:
Acuité visuelle:
RX: DS DC X

Date: 21-10-2019
Heure: 08:02
Age: 15

Fovea: 28 dB

à la normale.

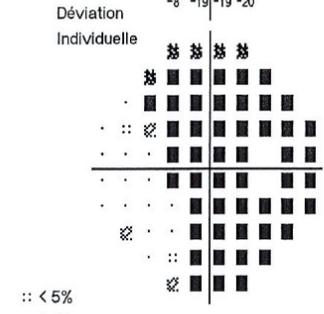
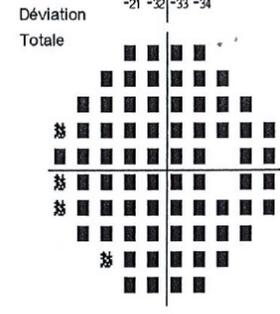


-26	-30	-30	-30
-24	-33	-32	-32
-14	-26	-34	-34
-15	-18	-18	-26
-16	-16	-14	-23
-13	-16	-11	-20
-17	-16	-10	-14
-19	-10	-12	-35
-10	-18	-34	-34
-21	-32	-33	-34

-12	-17	-16	-16
-10	-19	-19	-18
0	-12	-21	-21
-1	-5	-5	-13
-2	-2	0	-7
1	-2	2	-6
-3	-2	4	0
-6	4	2	-22
4	-4	-20	-20
-8	-19	-19	-20

THG
Hors limites normales

MD -27.34 dB P < 0.5%
PSD 10.36 dB P < 0.5%



∴ < 5%
⊗ < 2%
⊗ < 1%
■ < 0.5%

CABINET D ORTHOPTIE YAZALI
AV ALLAL EL FASSI IMM ALLOUMAIRI
TEL 044-31-16-49

29 oct. 2019 09:33:01
Image: 2

Hopital Cochin
OPTOS, P200DTx
Laterality: R
Red: 50%
Green: 50%

Zoom: 1,29
Type: PLUS
Presentation: Approved 29 oct. 2019

1/4
1

29 oct. 2019 09:33:43
Image: 6

Hopital Cochin
OPTOS, P200DTx
Laterality: L
Red: 50%
Green: 50%

Zoom: 1,42
Type: PLUS
Presentation: Approved 29 oct. 2019

1/3
1

Examens déjà pratiqués avant l'arrivée à Cochin :

IRM cérébrale : normale.

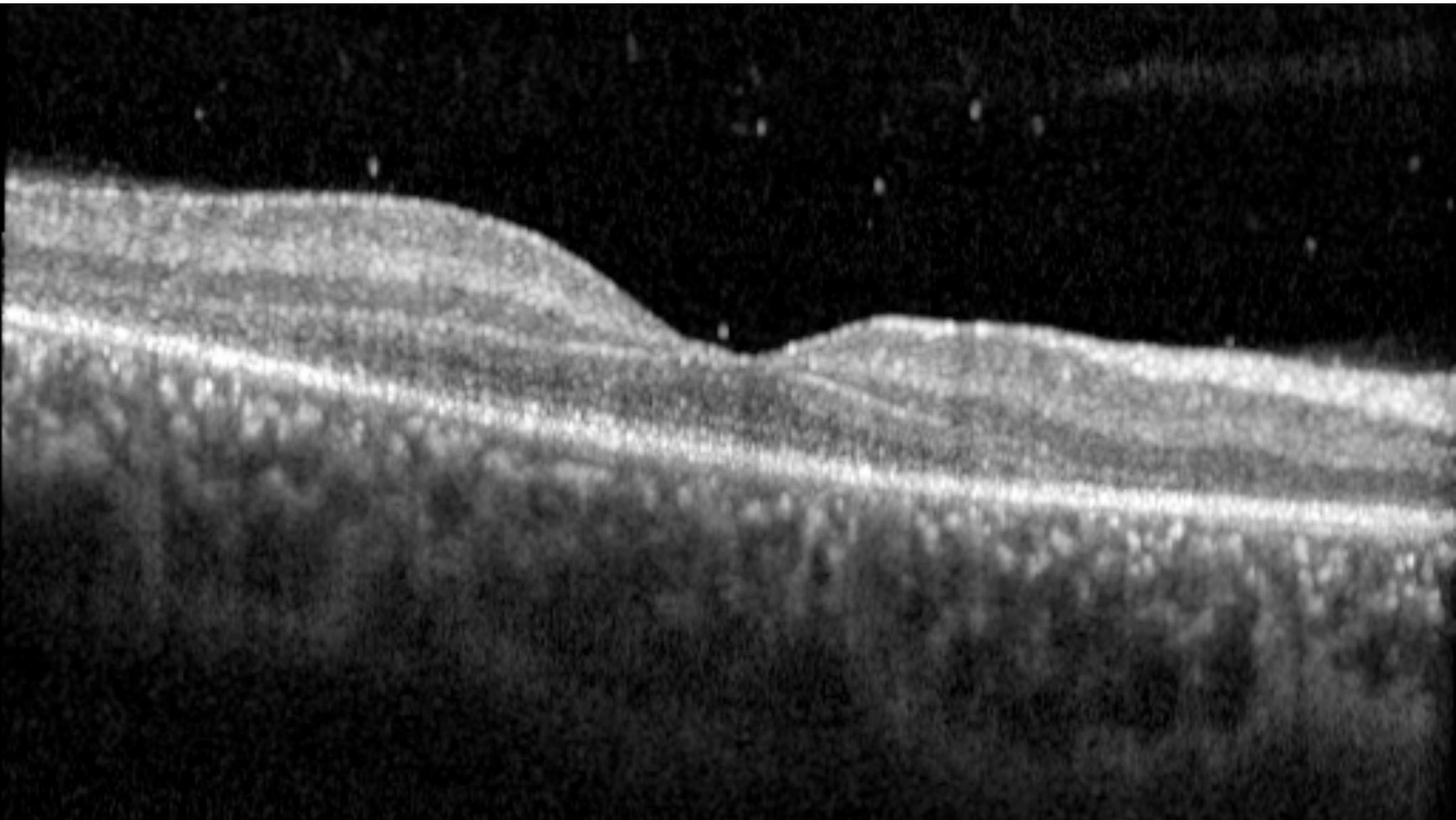
VS 5 mm à H1, CRP 1 mg/l.

NFS et créatininémie normales.

Traitement déjà effectué :

2 bolus IV de 500 mg corticoïdes, sans relais → Impression subjective de pause dans la dégradation visuelle

OCT le 29/10/19



Autofluorescence le 29/10/19



200 µm

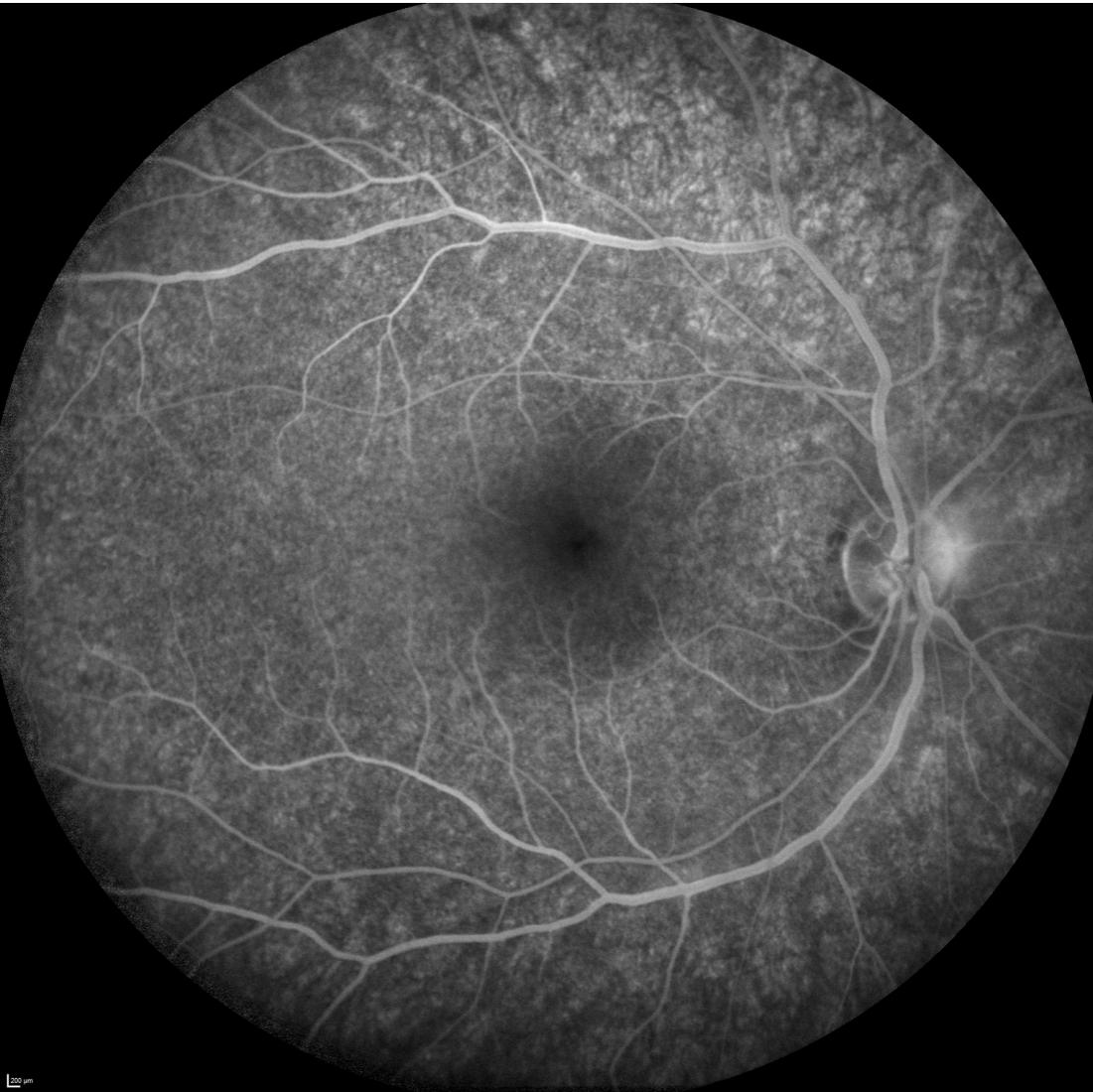
29/10/2019, OD
BAF 55° ART(57) [HR]

200 µm

29/10/2019, OS
HEIDELBERG BAF 55° ART(75) [HR]
ENGINEERING

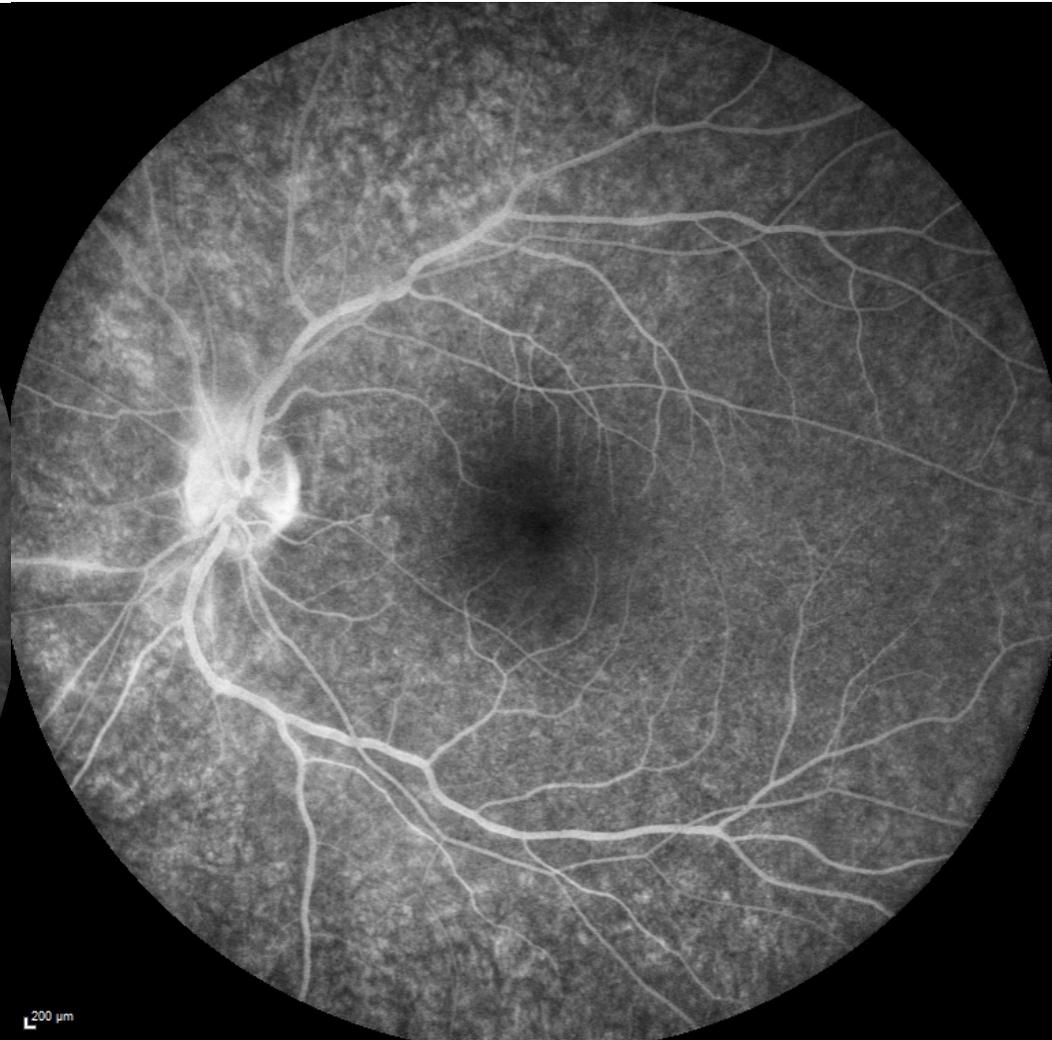
HEIDELBERG
ENGINEERING

Angiographie fluorescéinique le 29/10/19



200 µm

29/10/2019, OD
FA 7:23.28 55° ART(44) [HR]



200 µm

29/10/2019, OS
FA&ICGA 7:39.22 55° ART(15) 8:44.73 55° ART(15)

HEIDELBERG
engineering

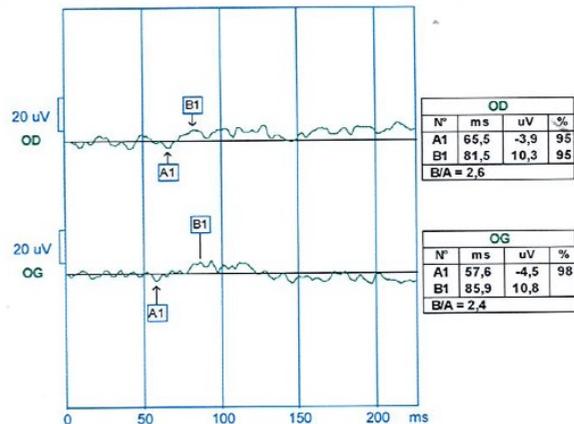
Quels autres examens complémentaires ?

nom :
 -dossier : 8013812151
 date naissa. : 31/10/2003

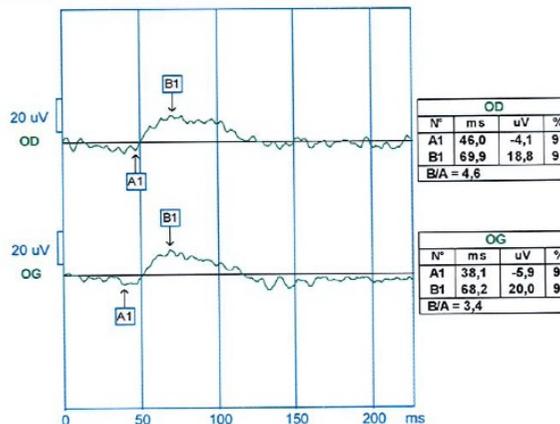
correction :
 date examen : 30/10/2019
 examen :

EXAMEN D'ELECTROPHYSIOLOGIE VISUELLE

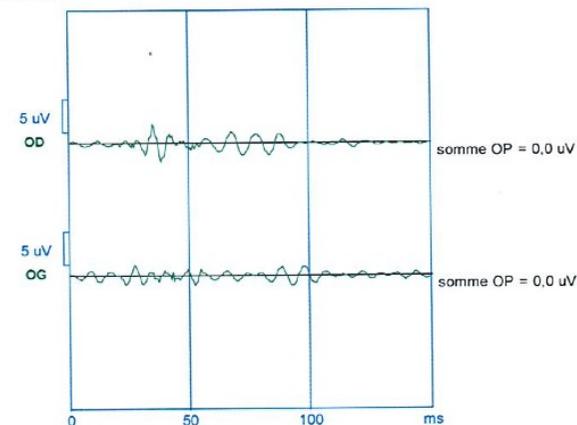
ERG des bâtonnets (-25dB) 10mn 36s Val= 8 Rej= 0
 BI stimulé



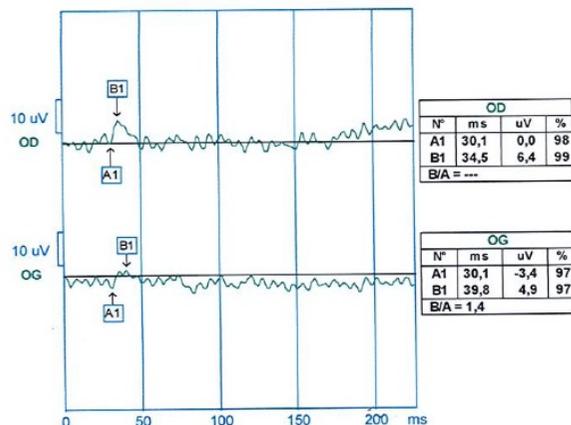
ERG mixte: (-15dB) 11mn 47s Val= 8 Rej= 0
 BI stimulé



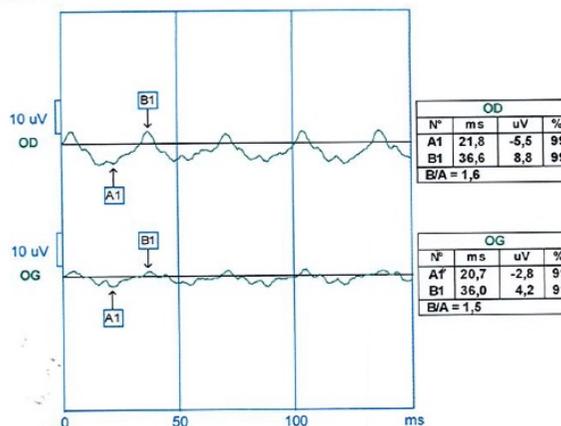
ERG potentiels oscillatoires 13mn 12s Val= 8 Rej= 0
 BI stimulé



ERG des cônes: flash blanc 20mn 24s Val= 17 Rej= 0
 BI stimulé



ERG des cônes: flicker 30Hz 20mn 51s Val= 30 Rej= 0
 BI stimulé



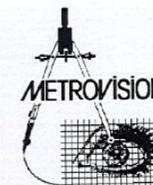
CENTRE COCHIN AMBULATOIRE D'OPHTHALMOLOGIE
 27, rue du Fg Saint Jacques
 75679 Paris cedex 12
 Chef de service : Pr Antoine BRÉZIN
 Responsable d'unité : Pr Dominique MARIOT

ASSISTANCE HÔPITAUX
 PUBLIQUE DE PARIS
 Groupe Hospitalier Cochin - Saint Vincent de Paul
 Service d'Ophtalmologie
 Pr Antoine BRÉZIN

Hôpital Cochin - 27 rue du Faubourg Saint Jacques - 75679 PARIS Cedex 14

(EC) ERG global (sc / bino)
 Protocole ISCEV.
 pupilles dilatées.
 NB: Copération GG part les examens

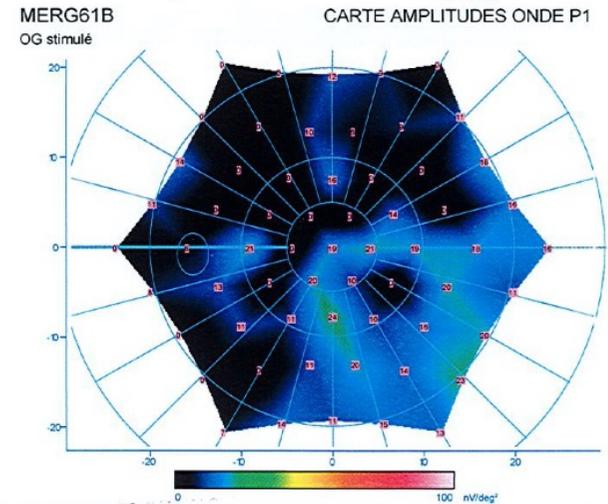
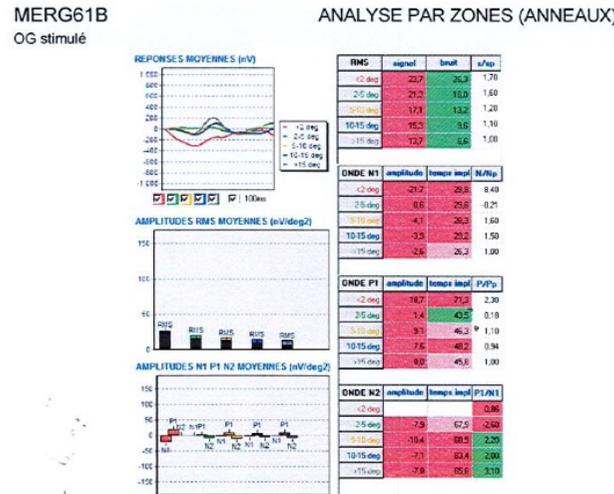
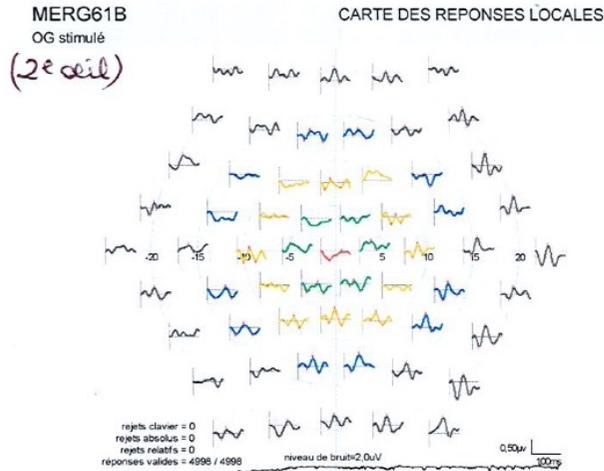
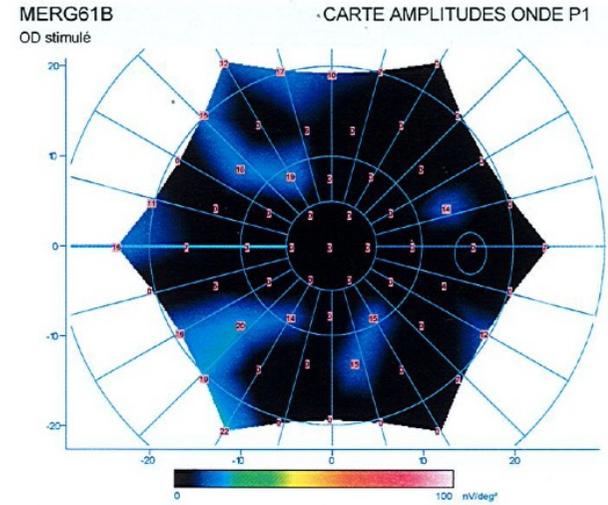
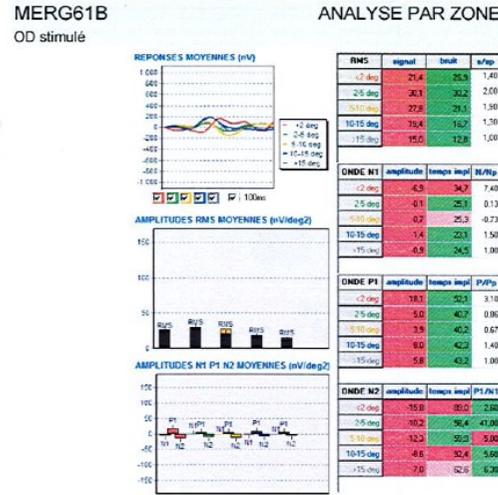
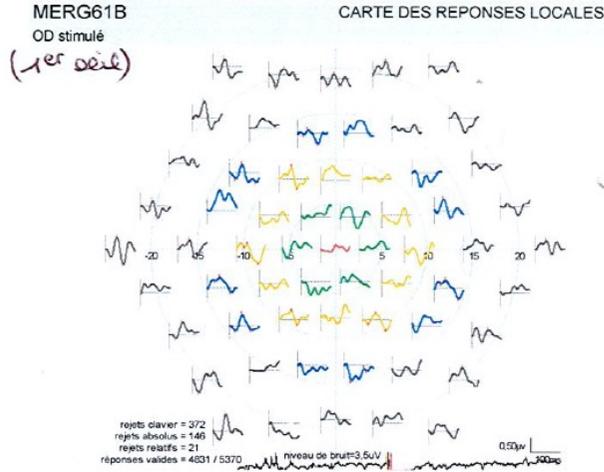
Moniteur
 Ophtalmologique
 WIN8000F
 Metrovision
 4 rue des platanes
 59840 Pérenchies
 France
 tel 33 (0)3 20 17 19 50
 http://www.metrovision.fr



nom :
 _dossier : 8013812151
 date naissa. : 31/10/2003

correction : +2.75
 date examen : 30/10/2019
 examen :

EXAMEN D'ELECTROPHYSIOLOGIE MULTIFOCALE



(EC) ERG MF OD/OG
 pupilles dilatées
 coopération ⊕⊕ / fixation parfaite.
 Lentilles : ERG jet utilisées OD/OG.



Quelles hypothèses diagnostiques ?

Autoimmune Retinopathy

LANDON GRANGE, MONICA DALAL, ROBERT B. NUSSENBLATT, AND H. NIDA SEN

- **PURPOSE:** To provide a detailed review of current clinical guidelines for the diagnosis, work-up and treatment of autoimmune retinopathy and to preview briefly possible future therapies.
- **DESIGN:** Perspective based on literature review and clinical expertise.
- **METHODS:** Interpretation of current literature, relying on the authors' clinical experience.
- **RESULTS:** Autoimmune retinopathy is a rare immunologic disease characterized by the presence of circulating antiretinal antibodies along with electroretinographic and visual field abnormalities. An ophthalmic examination can be normal or show minimal findings. The diagnosis of autoimmune retinopathy is made difficult by diagnostic criteria that are both limited and nonstandardized. Currently, the diagnosis is made based on the demonstration of serum antiretinal antibodies and the presence of clinical manifestations (including abnormal electroretinographic findings). The mere presence of these antibodies is not diagnostic. Lack of an accepted gold standard for antiretinal antibodies detection and poor interlaboratory concordance make the diagnosis challenging. There are anecdotal reports of immunosuppressive therapy in autoimmune retinopathy; however, the response to treatment is variable, with more favorable results achieved in paraneoplastic retinopathy, particularly cancer-associated retinopathy, with a combination of chemotherapy and immunosuppression. Whether an earlier attempt to treat nonparaneoplastic autoimmune retinopathy would be more beneficial is unknown. Early treatment attempts are limited by lack of sensitive and specific assays and definitive clinical criteria.

- **CONCLUSIONS:** Little is known about the clinical course, prognosis and treatment of autoimmune retinopathy. Additional studies should examine the specificity and pathogenicity of antiretinal antibodies and screen for biomarkers, and they should be conducted concurrently with studies seeking to identify appropriate treatment. (Am J Ophthalmol 2014;157:266–272. Published by Elsevier Inc.)

Didar U. Comlekoglu, Ian A. Thompson, and H. Nida Sen

Purpose of review

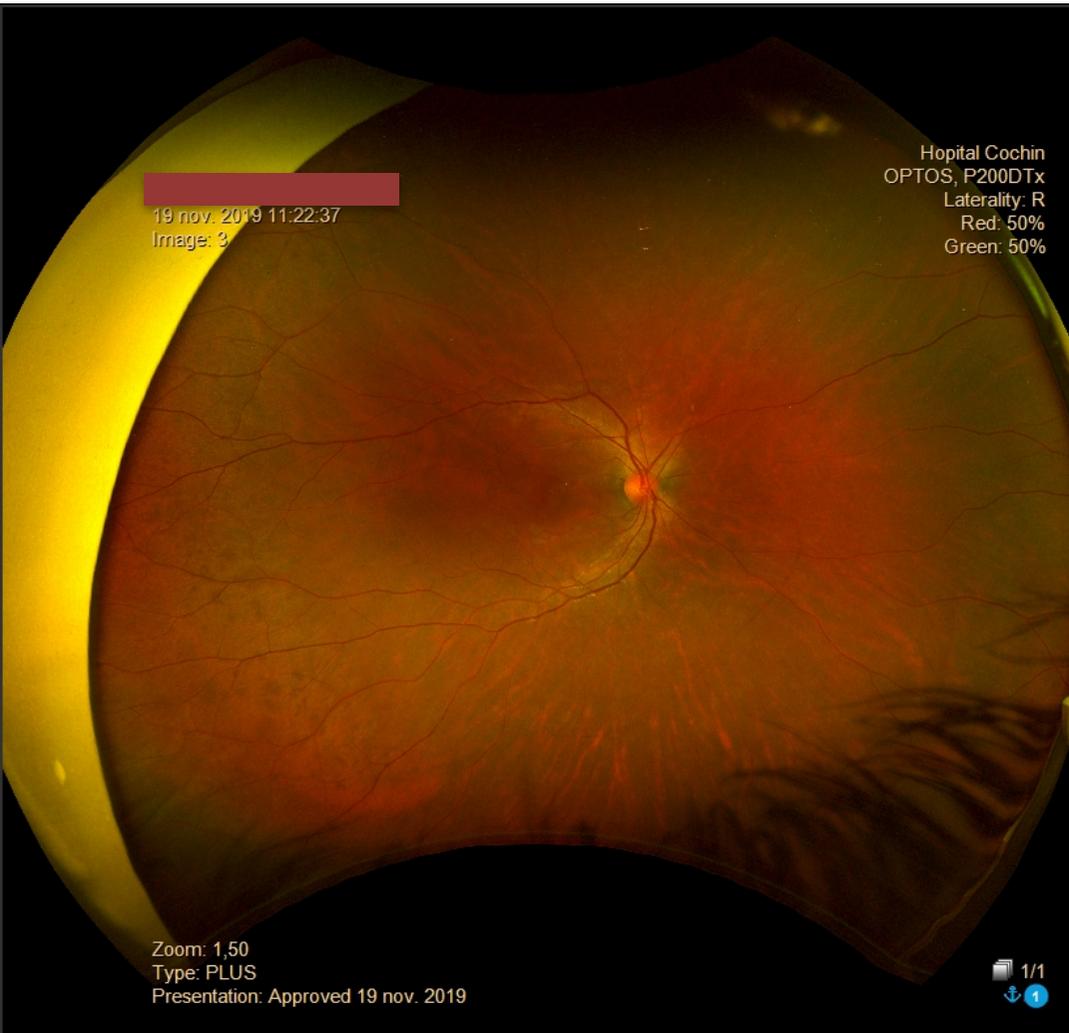
Autoimmune retinopathy (AIR) is an immune-mediated disorder characterized by progressive visual loss, abnormal electroretinographic and visual field findings in the presence of circulating anti-retinal antibodies. This review highlights advances made toward understanding the pathophysiology, clinical manifestations, and trends in the management of AIR.

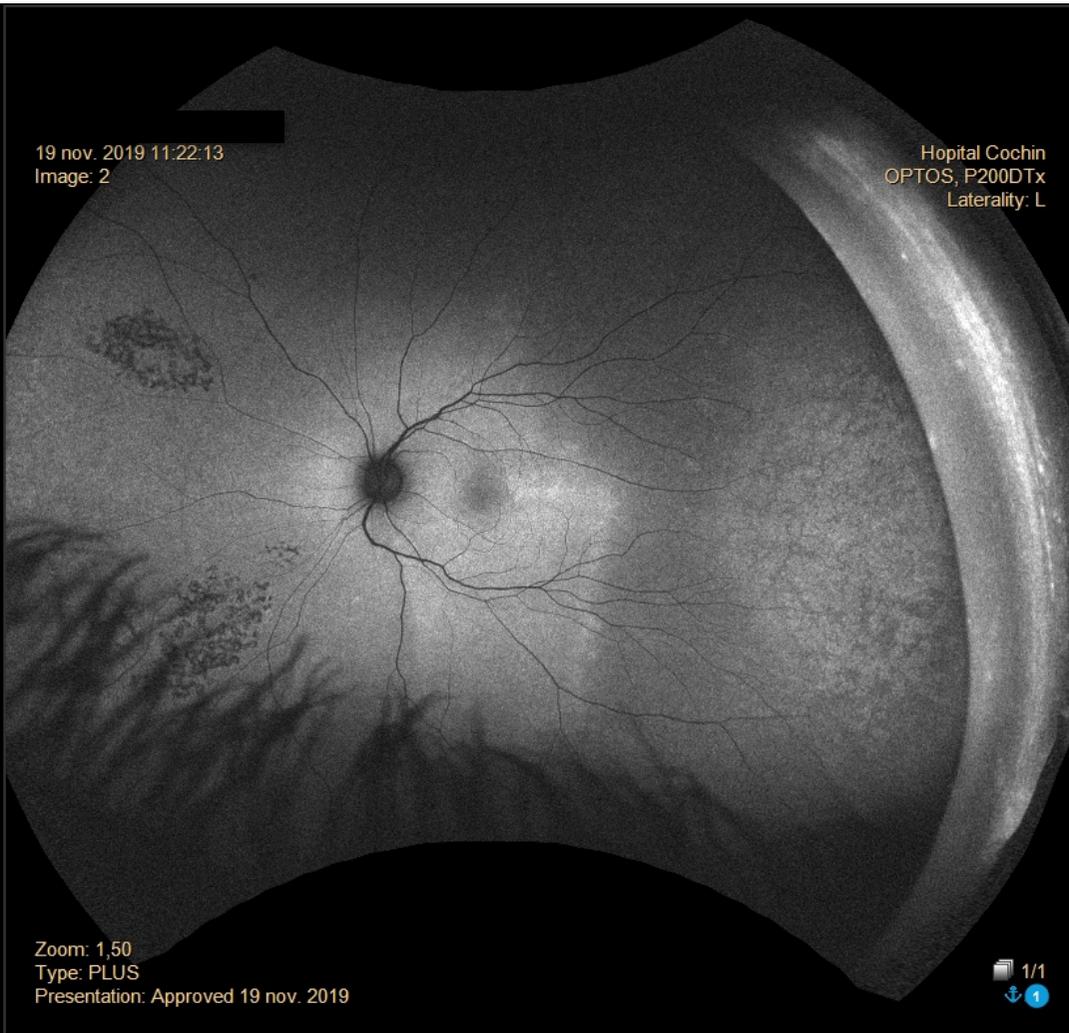
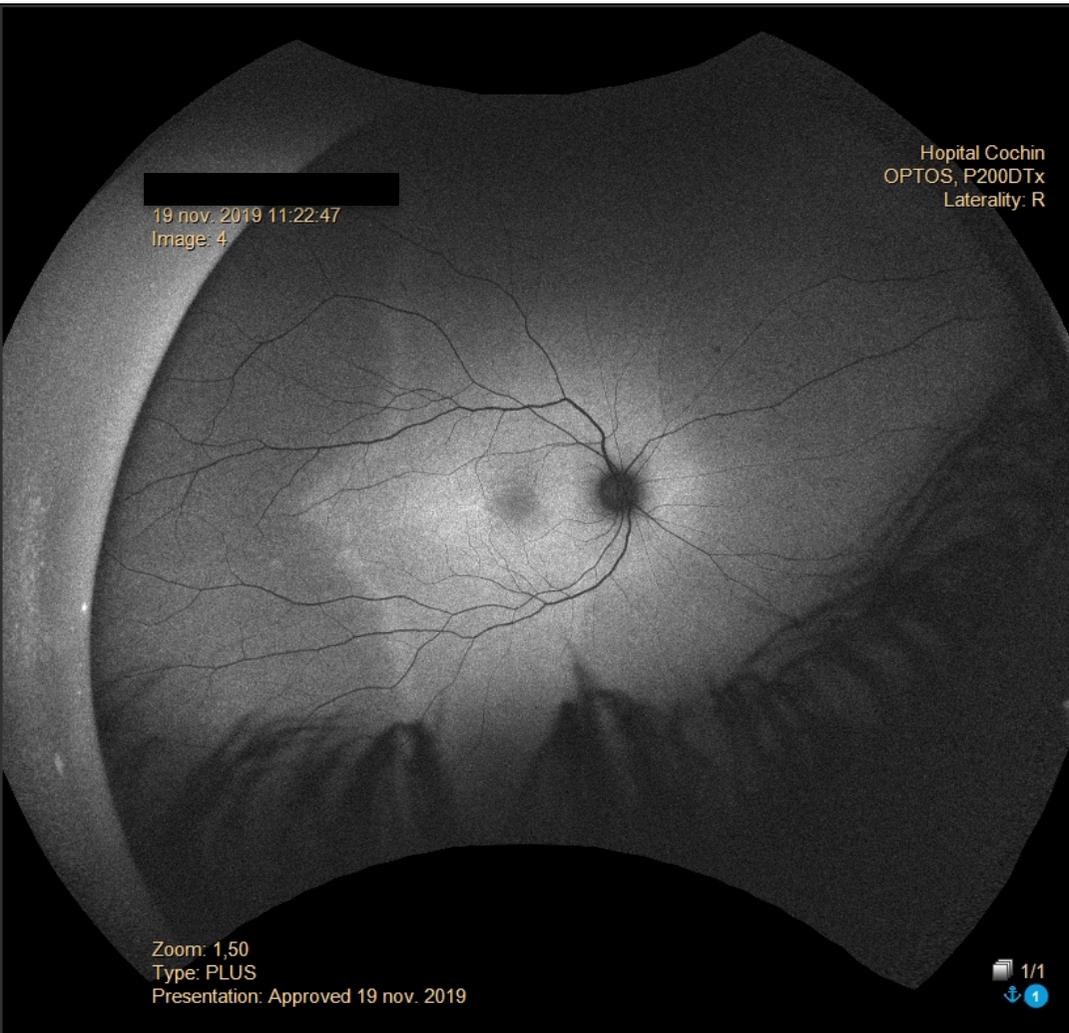
Recent findings

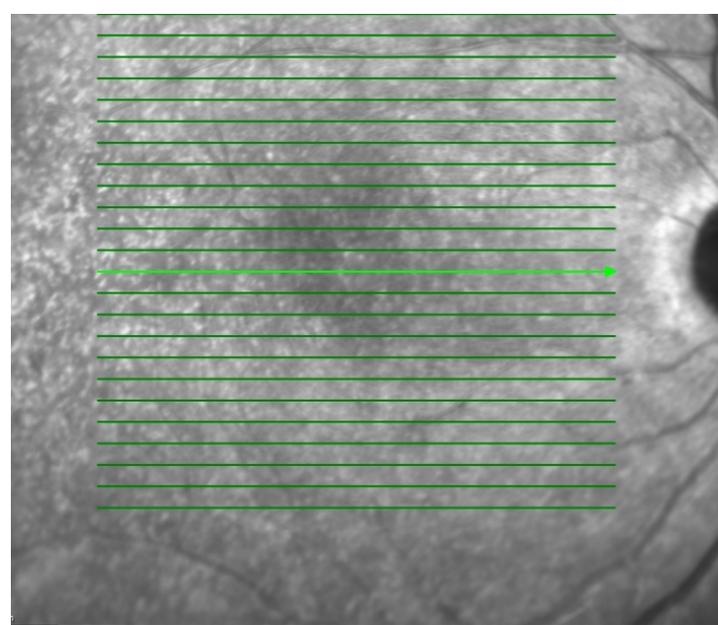
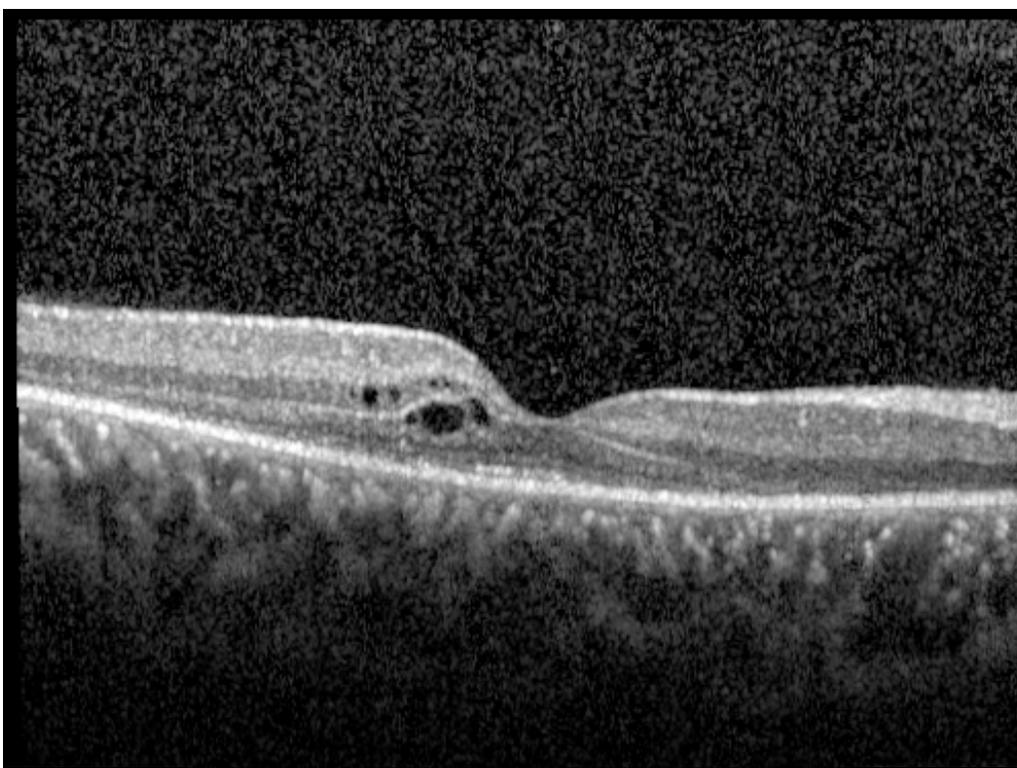
The pathophysiology of AIR is likely antibody-mediated. AIR serum autoantibodies are variable in their size and retinal tissue they target and can also be present in healthy controls and multiple autoimmune diseases. Rarely, AIR may be associated with dysregulated self-tolerance mechanisms in the thymus. Despite progress in research, our understanding of AIR remains incomplete. Lack of standardized methods for anti-retinal antibody testing continues to challenge the interpretation of seropositivity. Conventional immunosuppressives have been further studied, and promising immunomodulatory therapies, such as targeted B-cell therapy, have been introduced. Newer imaging modalities such as fundus autofluorescence and spectral domain optical coherence tomography may be helpful in diagnosis, monitoring progression of disease and response to treatment.

Summary

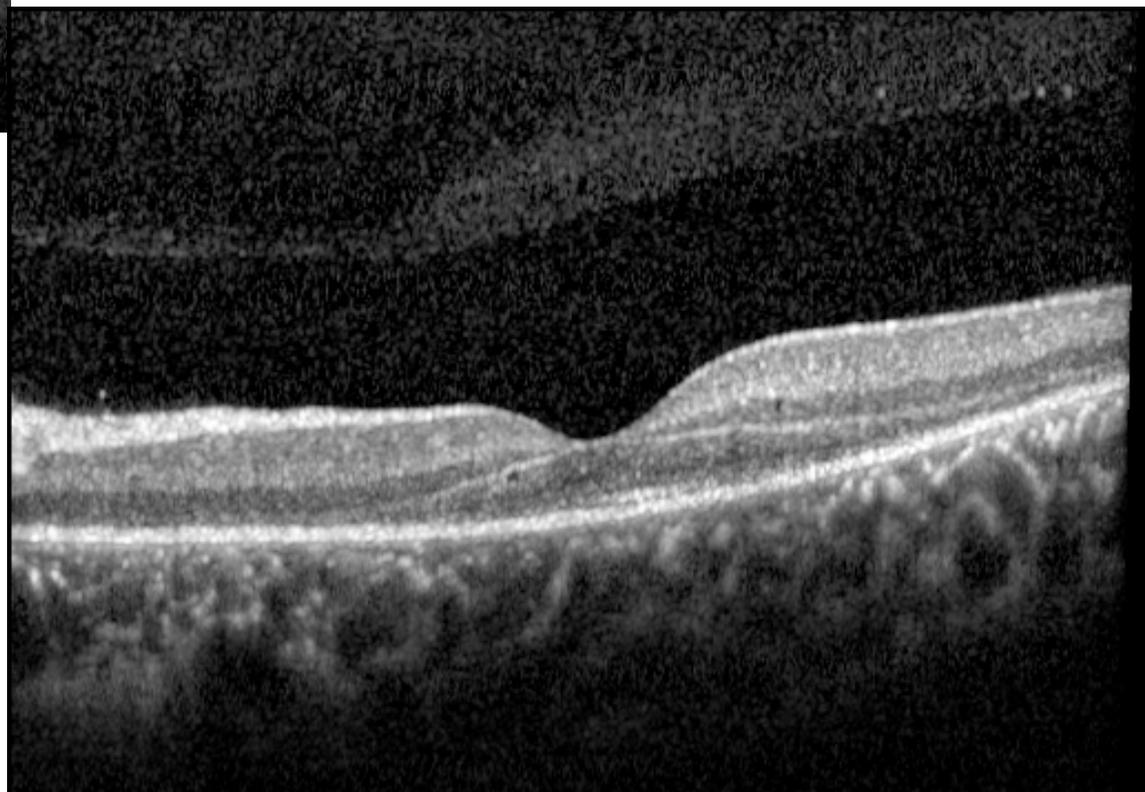
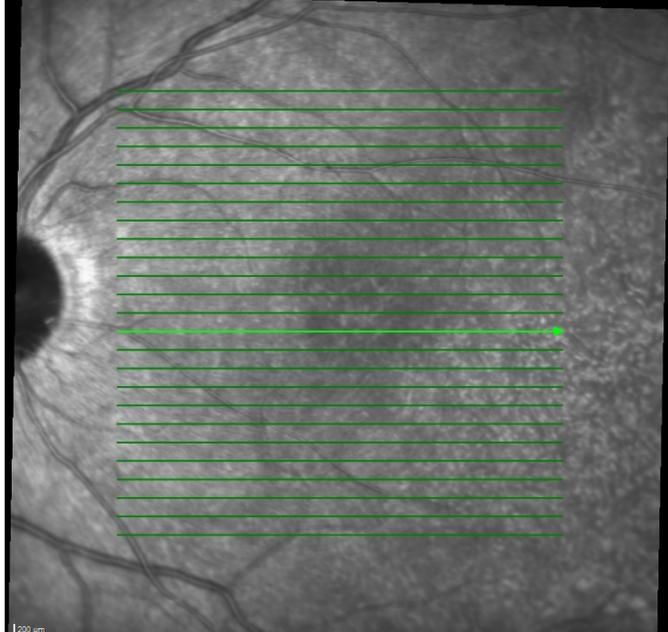
AIR is a rare but vision-threatening disease whose pathogenesis is poorly defined. Lack of standardized clinical or laboratory criteria further complicates the diagnosis and management. Despite recent progress, further basic science research into the autoimmune process is needed. Prospective controlled clinical trials with immunomodulatory therapy can help define future treatment paradigms

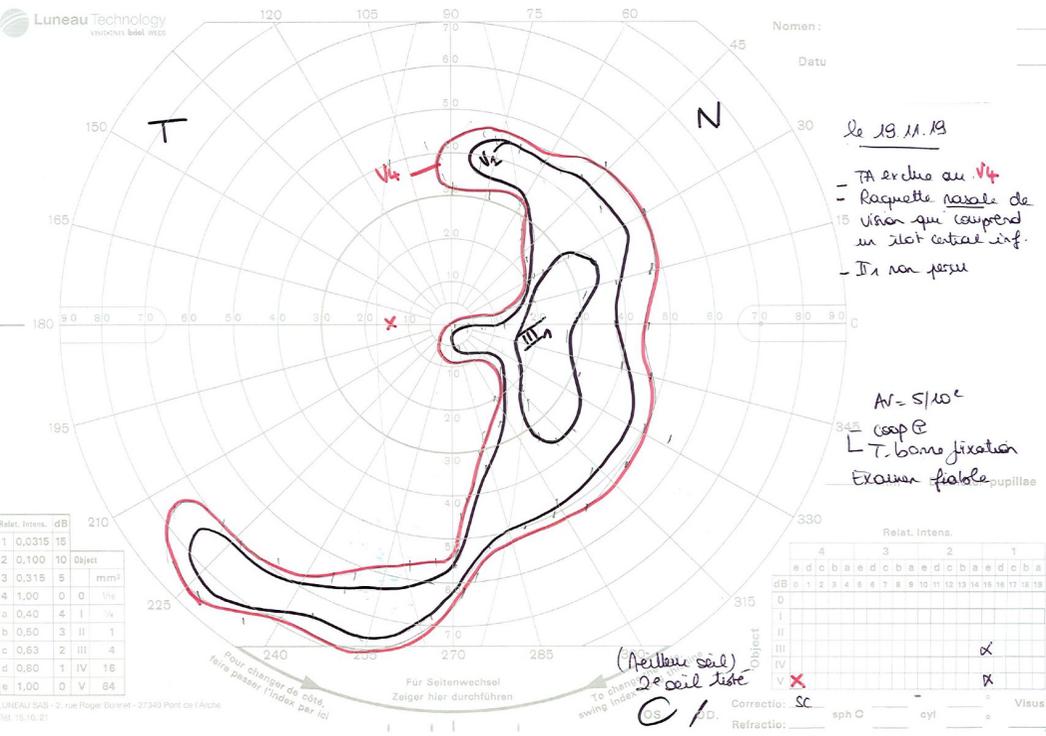




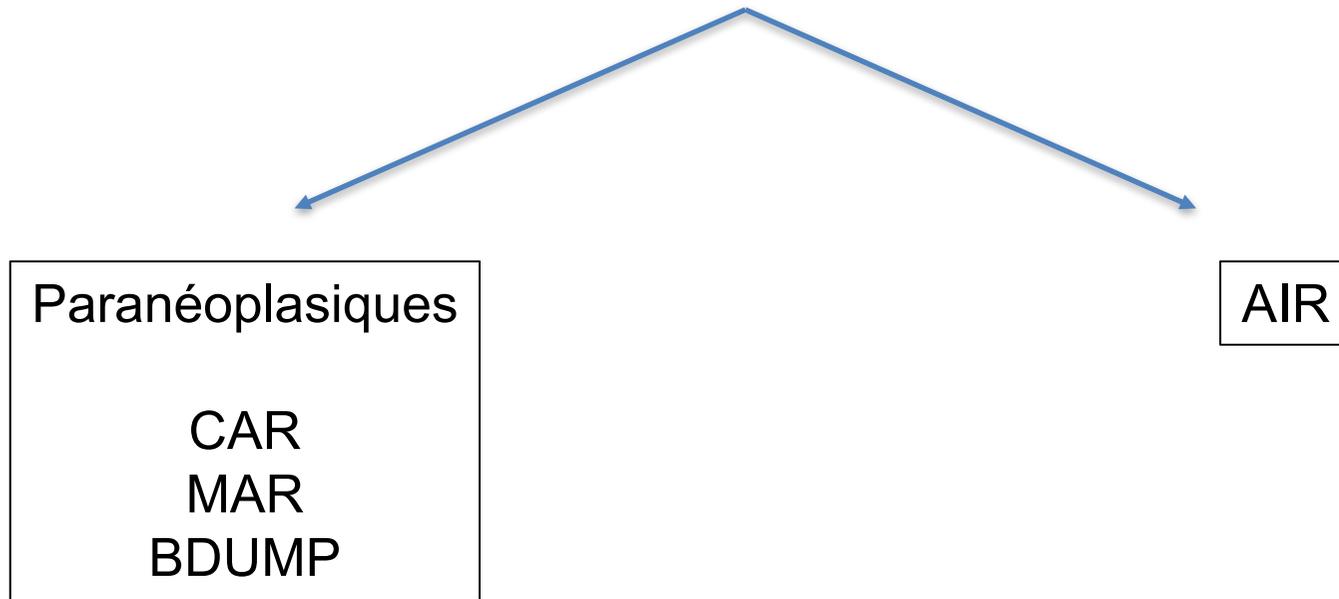


12 / 25





Rétinopathies auto-immunes



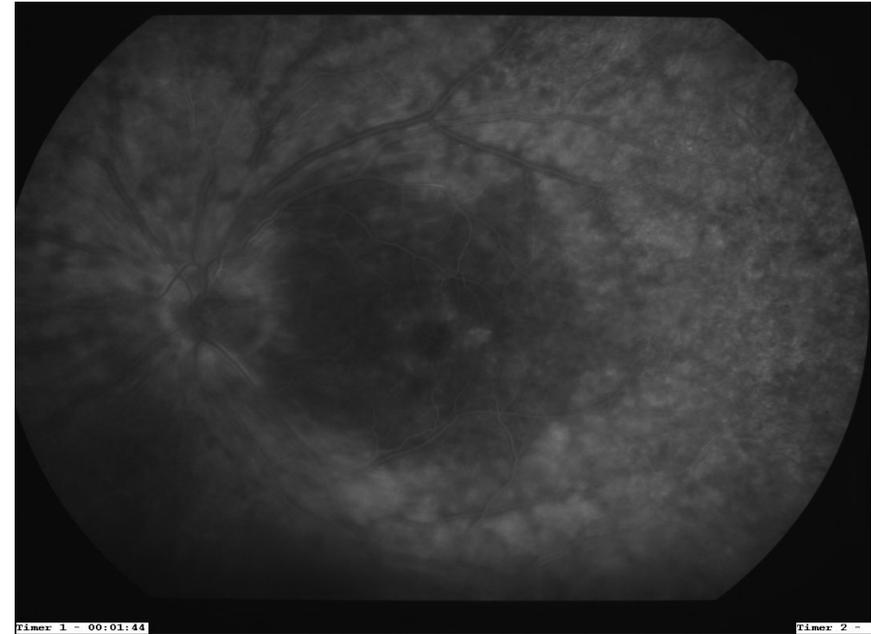
Monsieur L. 71 ans



**BAV
depuis 9
mois**

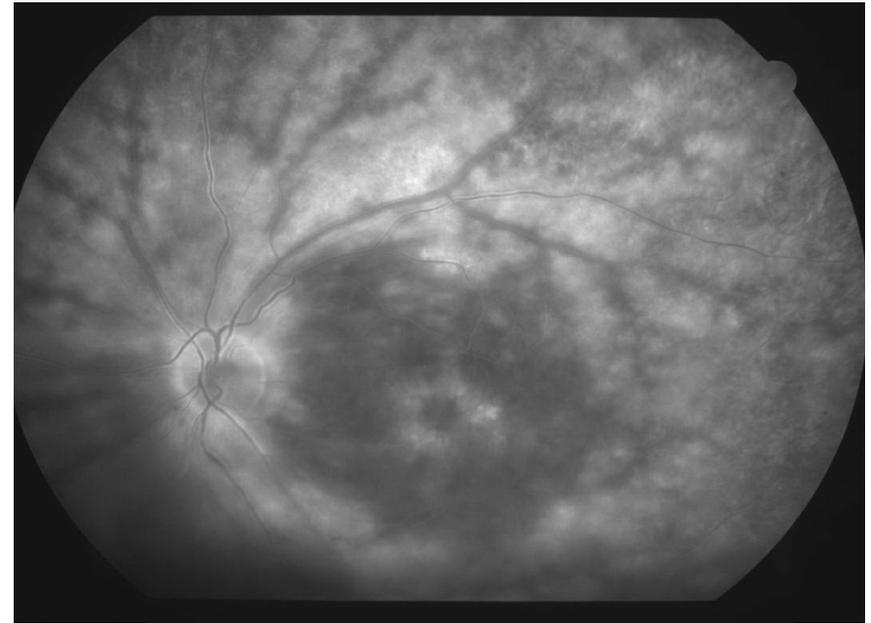
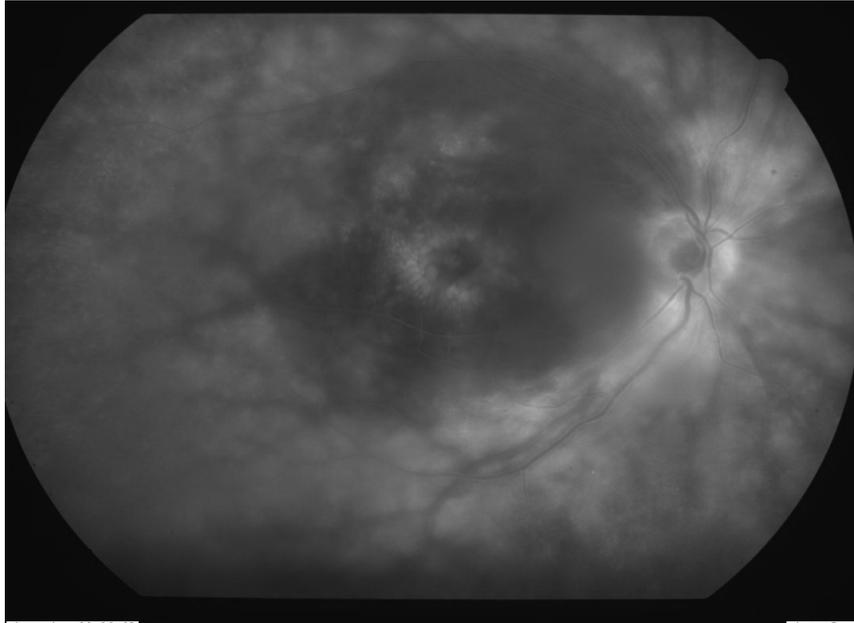
0,3 – 0,2

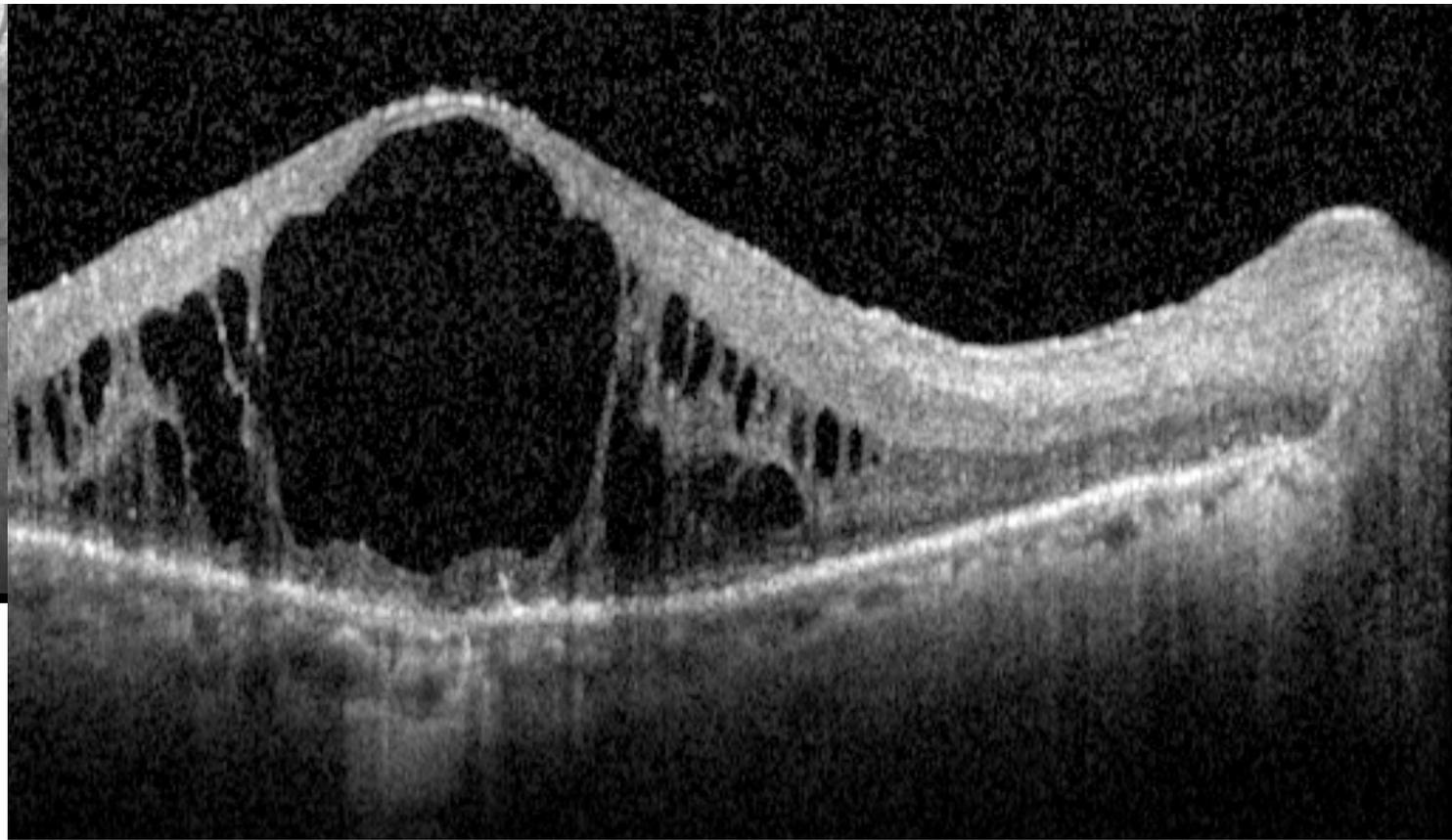
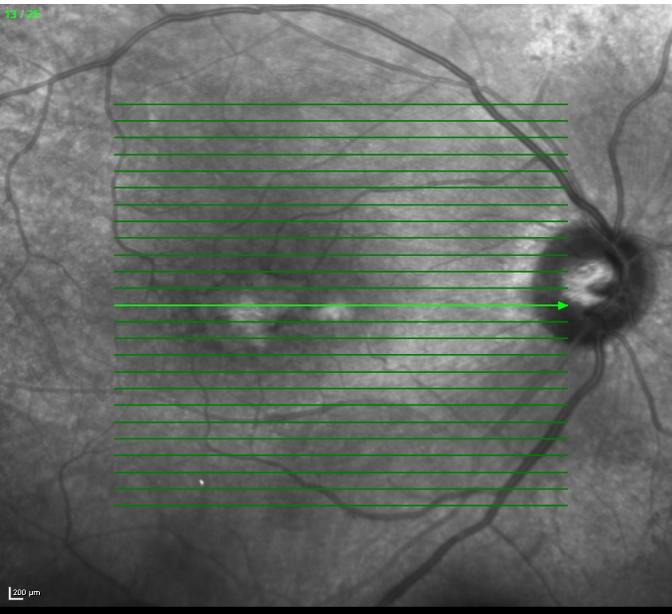
**Hyalite
1-2+**

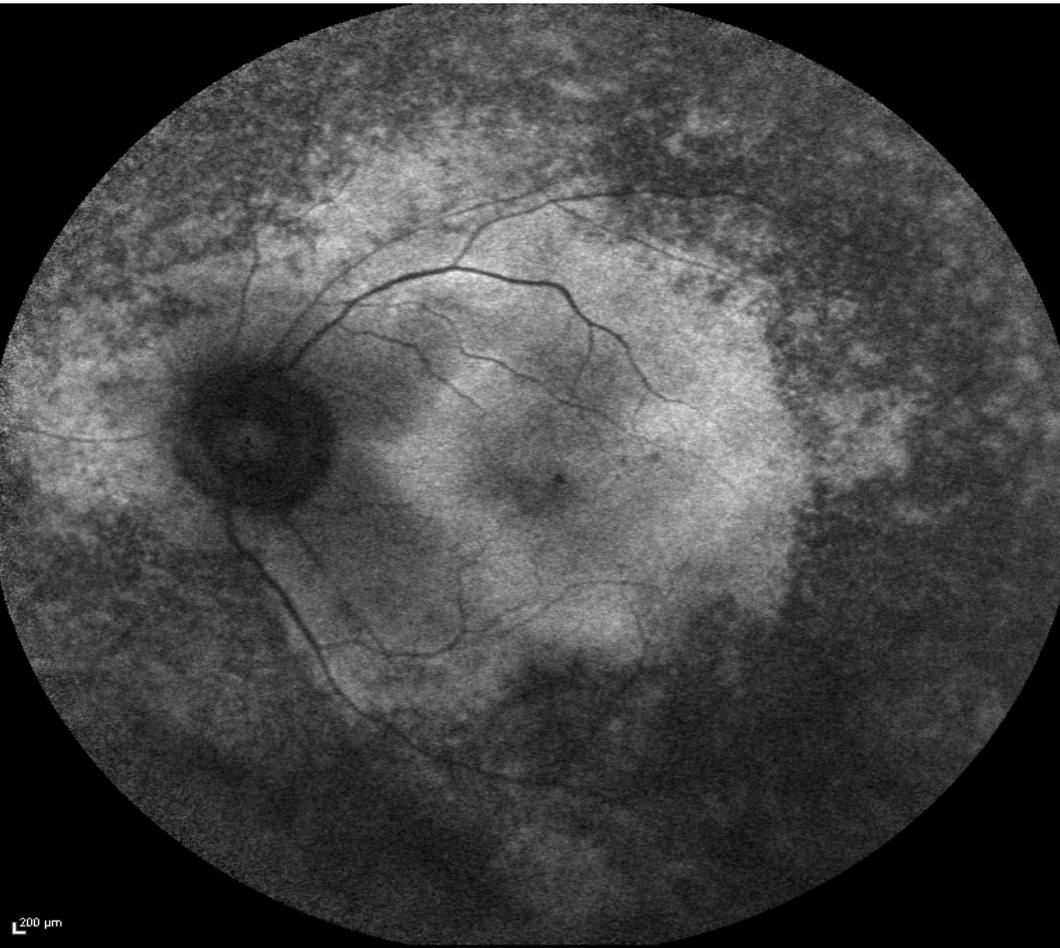
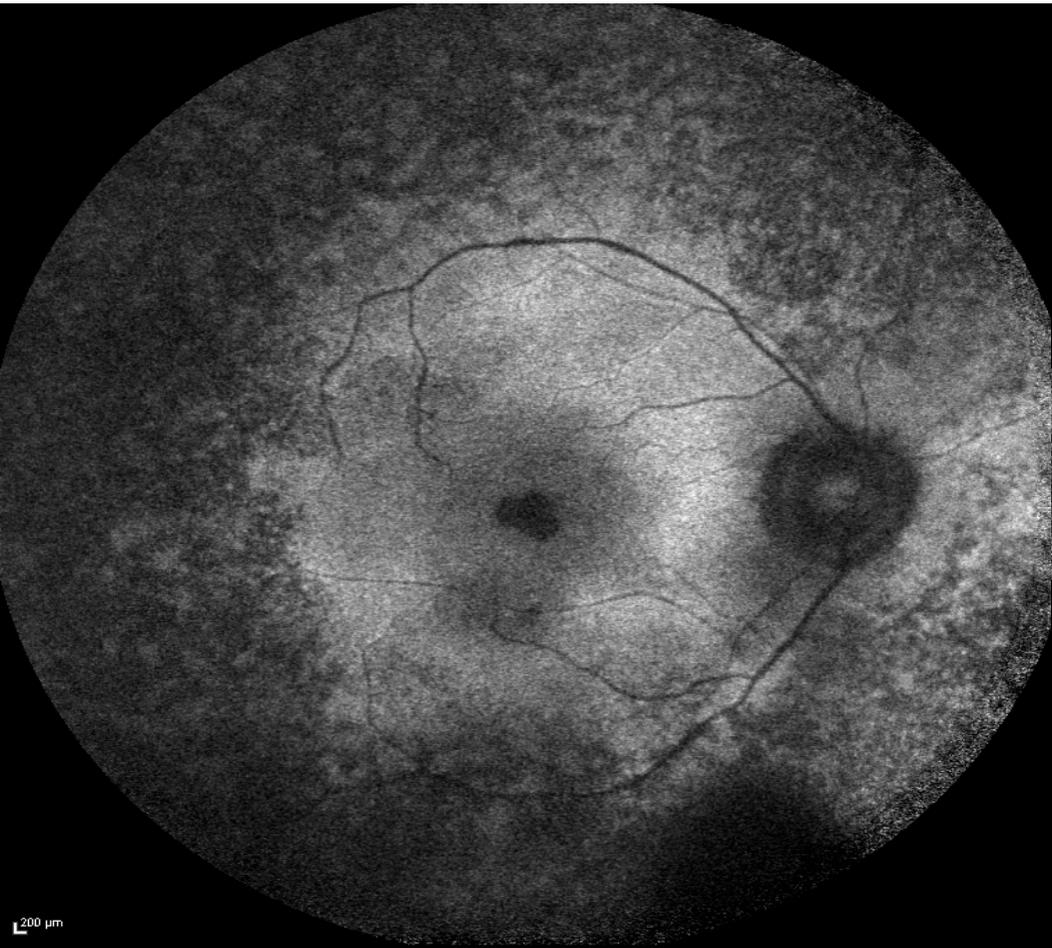


**Œdème
maculaire
bilatéral**

**malgré
prednisone
per os
60→10mg/j**

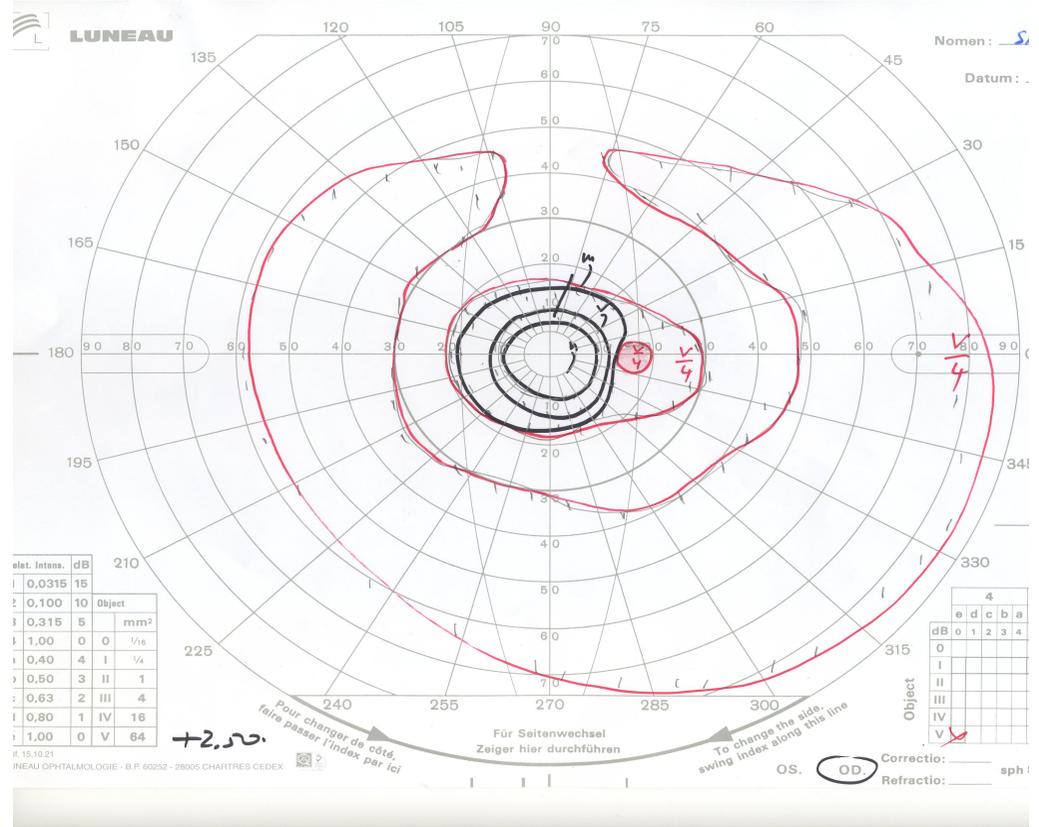
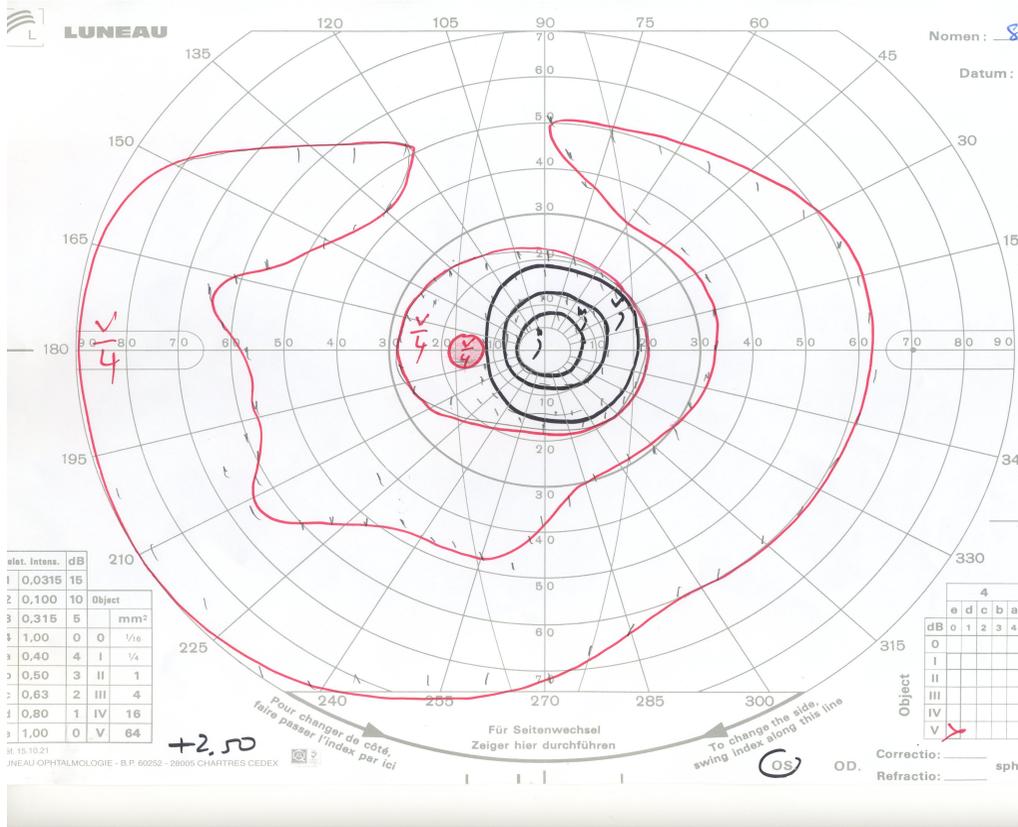






12/03/2015, OD
AF 55° ART(17)

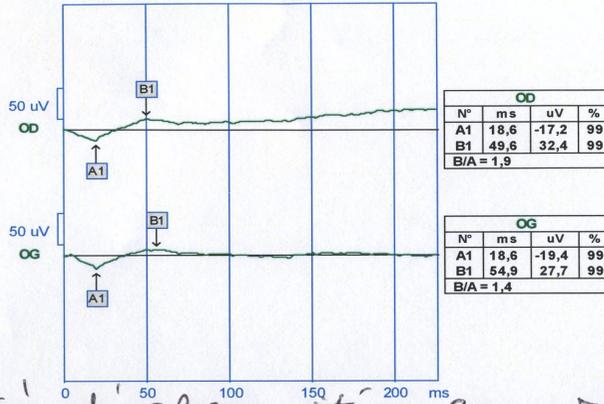
12/03/2015, OS
AF 55° ART(64)



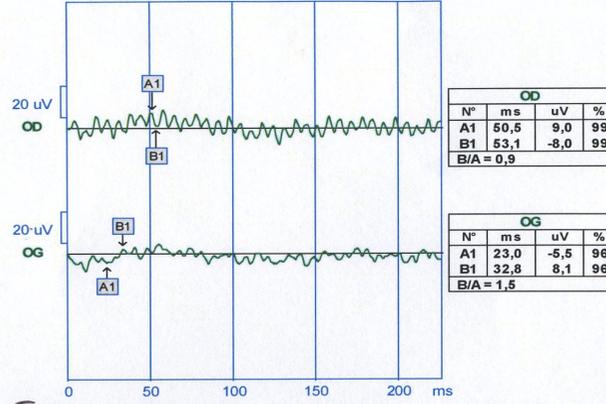
PHOTOPHIQUE

EXAMEN D'ELECTROPHYSIOLOGIE VISUELLE

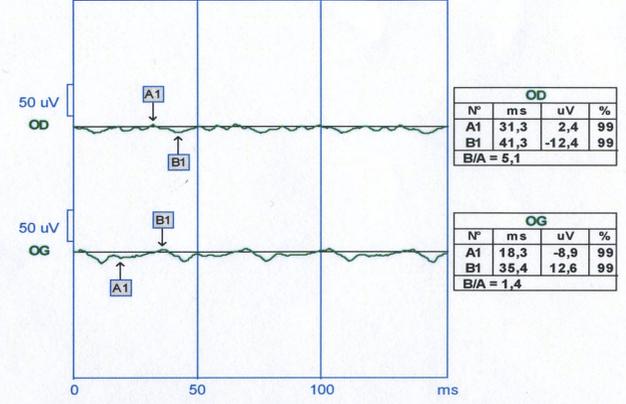
ERG des cônes: flash blanc 3mn 7s Val= 30 Rej= 0
BI stimulé



ERG des cônes: flash rouge 5mn 3s Val= 30 Rej= 0
BI stimulé

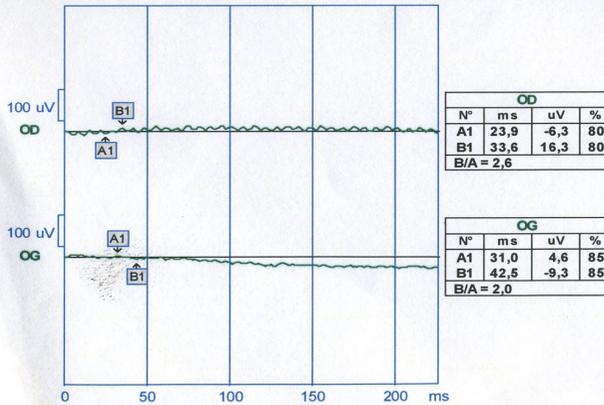


ERG des cônes: flicker 30Hz 5mn 33s Val= 30 Rej= 0
BI stimulé

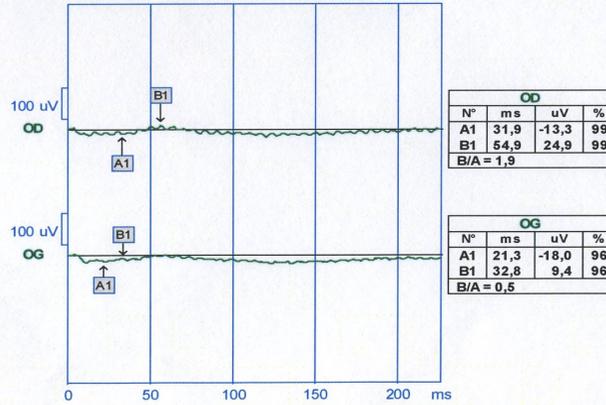


S' d'obscurité: SCOTOPHIQUE

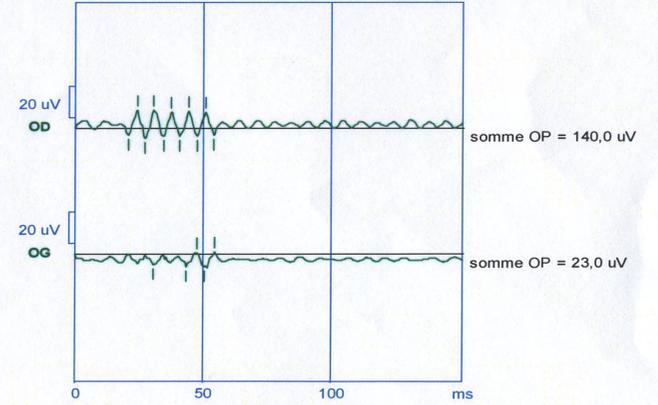
ERG des bâtonnets (-25dB) 12mn 45s Val= 8 Rej= 0
BI stimulé



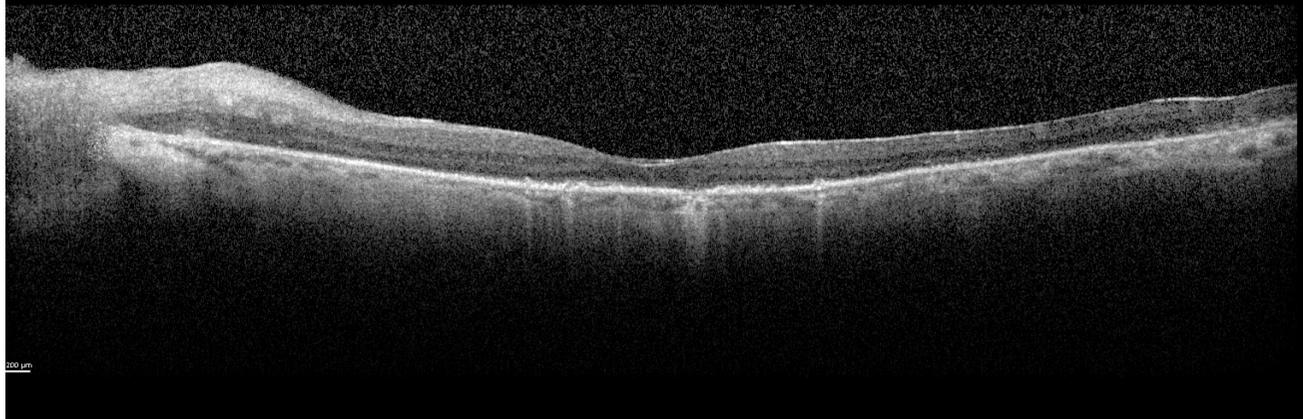
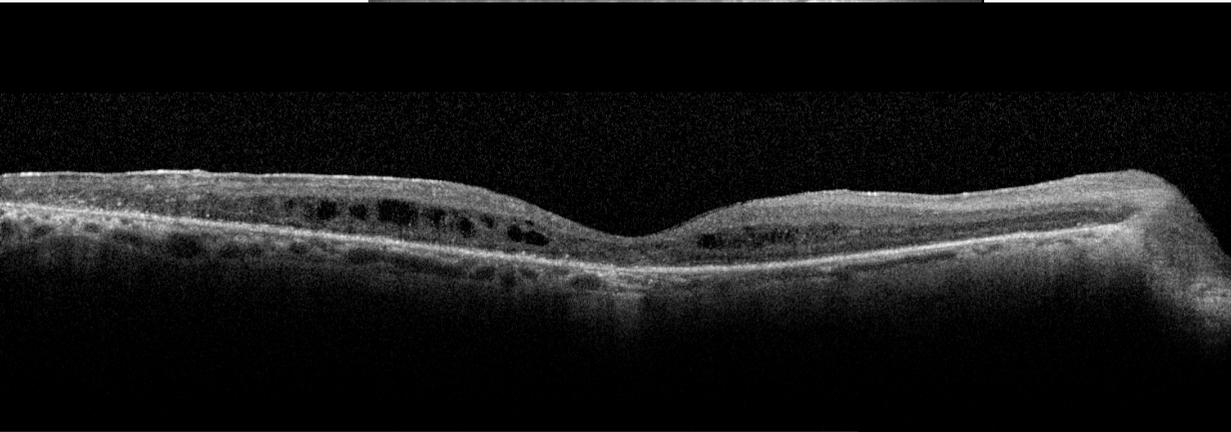
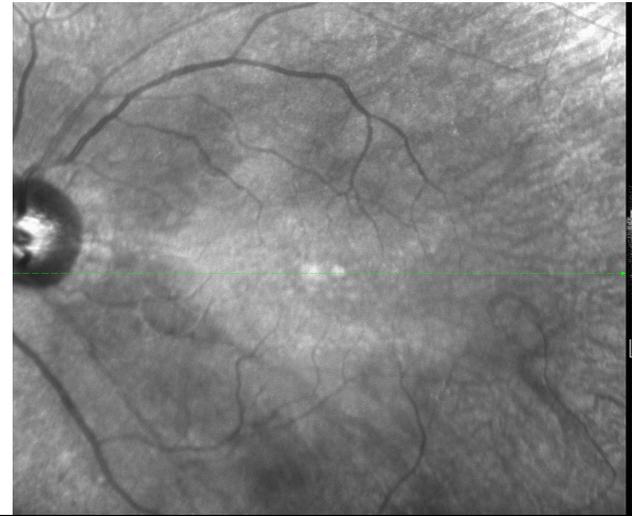
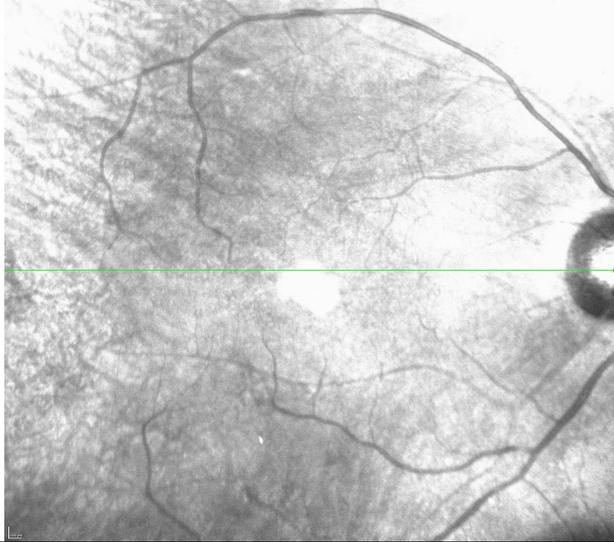
ERG mixte: cônes +bâtonnets 14mn 55s Val= 8 Rej= 0
BI stimulé

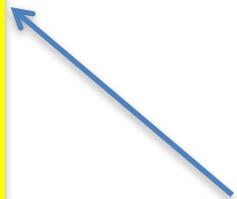
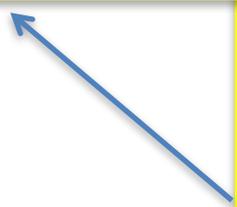
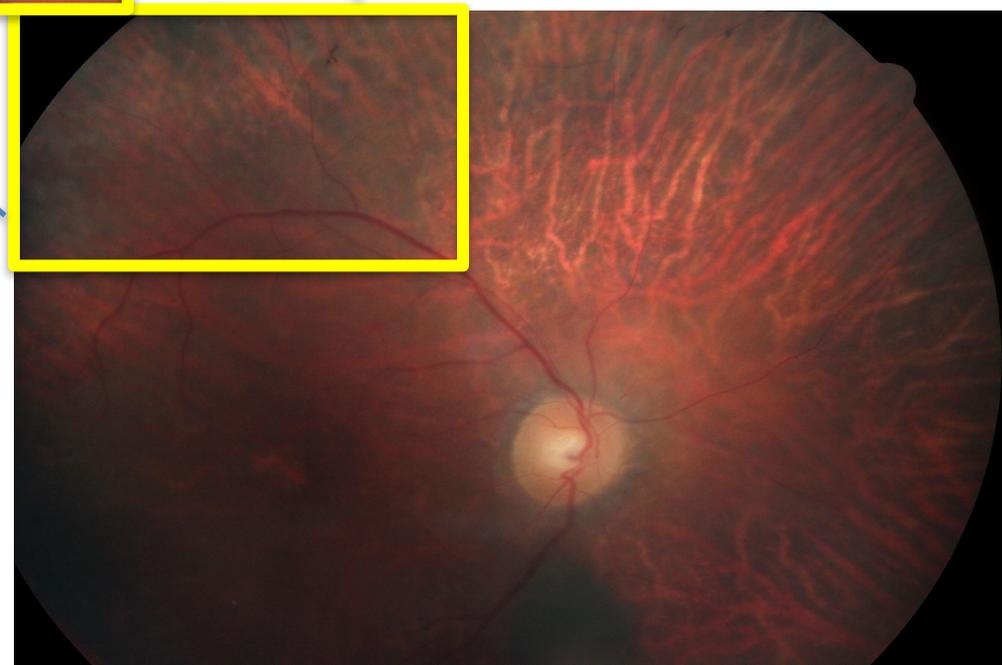
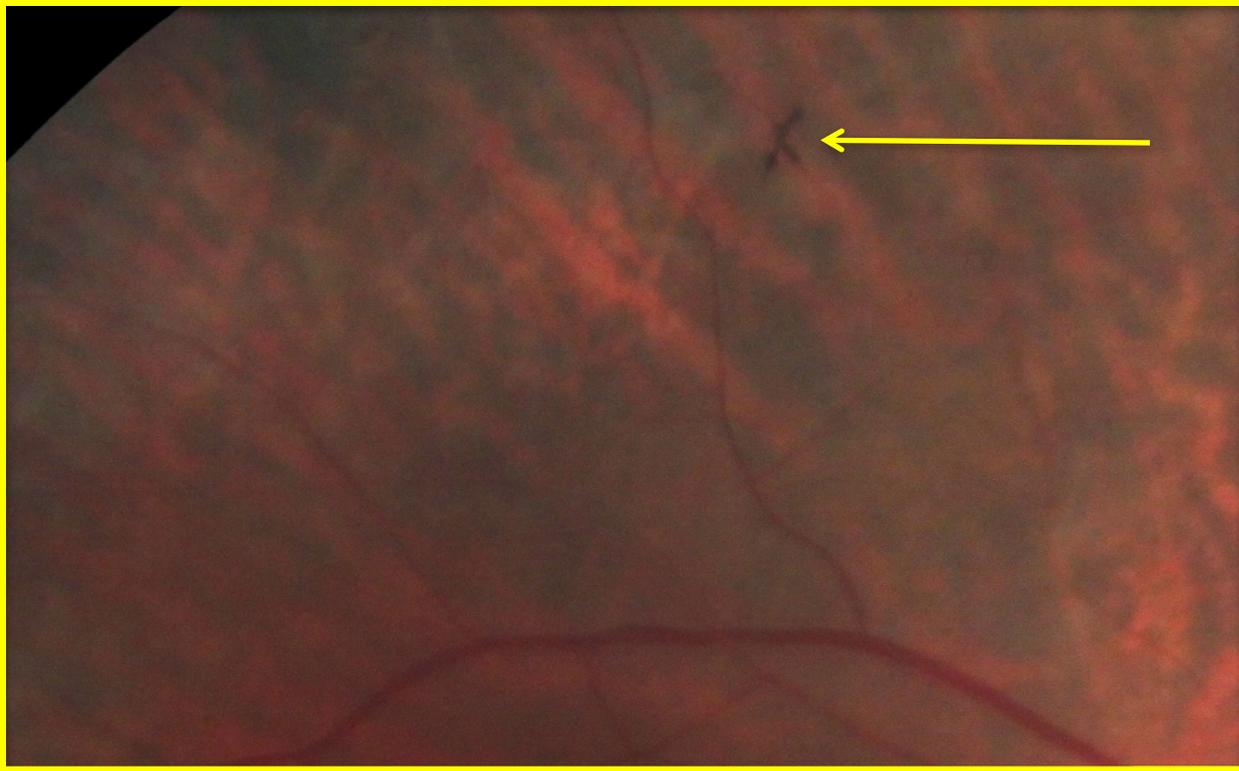


ERG potentiels oscillatoires 16mn 21s Val= 8 Rej= 0
BI stimulé



Cinq ans plus tard





RESEARCH ARTICLE

Open Access



Cancer-associated retinopathy preceding the diagnosis of cancer

Florence Hoogewoud^{1*} , Pauline Butori¹, Philippe Blanche² and Antoine P. Brézin¹

Abstract

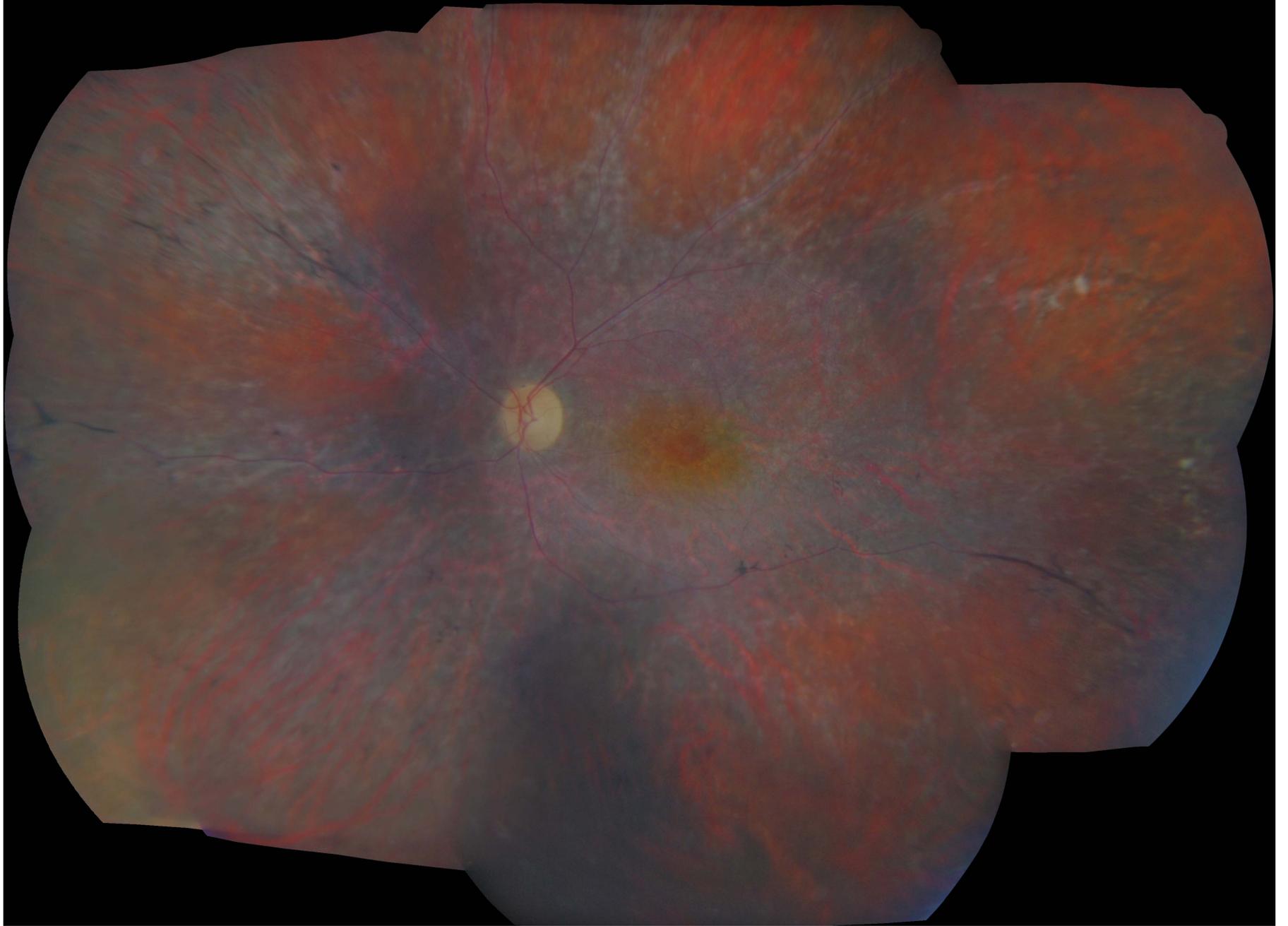
Background: The early diagnosis of cancer is of crucial importance and a key prognostic factor. Cancer-associated retinopathy (CAR) can be symptomatic prior to other manifestations directly related to malignant tumors. The aim of this study was to show that, in selected cases, ophthalmic findings are consistent enough with the diagnosis of CAR to trigger investigations aimed at detecting a previously unknown malignancy.

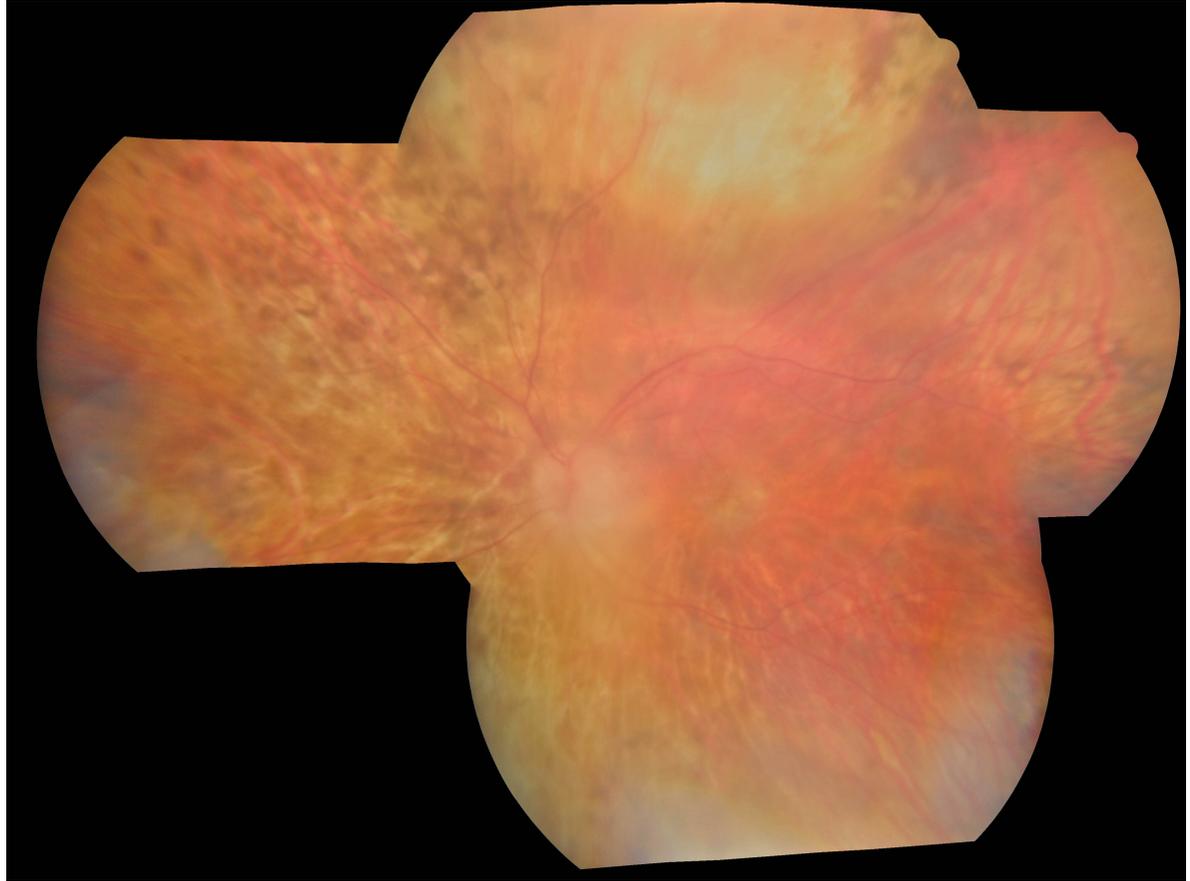
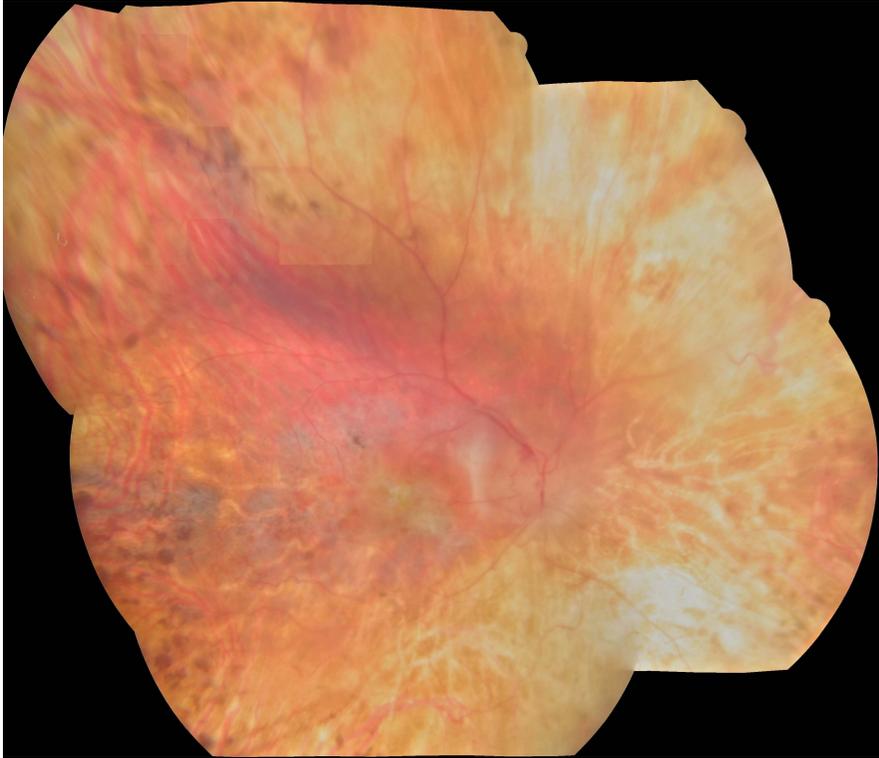
Methods: This was a monocentric retrospective case series performed in a tertiary referral center. Patients with a diagnosis of CAR were included. Diagnosis was based on the clinical presentation, the visual field and electroretinogram alterations. The clinical presentation, visual field testing and electroretinographic results were analyzed as well as the malignancies identified following the diagnosis of CAR. Follow-up data was collected.

Results: Four patients (two men, two women, median age 65.5 years) were included. All patients presented with posterior segment inflammation at initial presentation as well as advanced visual field loss and an extinguished electroretinogram. The best corrected decimal visual acuity was 0.8 or better in both eyes of three patients and decreased to 0.3 OD and 0.2 OS in one patient due to a bilateral macular edema. No patient had a previously known history of cancer. Once the diagnosis of CAR was made, investigations aimed at identifying a malignant tumors subsequently led to the diagnosis of two cases of small cell lung tumors, of one prostate carcinoma and of a uterine sarcoma. The treatment of CAR included plasmapheresis, systemic corticosteroids, azathioprine, cyclosporine and periocular or intraocular corticosteroid injections. In all cases the intraocular inflammation resolved, but pigment mottling, diffuse retinal atrophy, optic disc pallor and arterial narrowing were among manifestations observed during the follow-up of the patients.

Conclusion: In selected patients, findings suggestive of CAR can be useful for the early detection of a cancer.

Keywords: Cancer-associated retinopathy, Uveitis, Paraneoplastic retinopathy, Cancer





Melanoma Associated Retinopathy (M.A.R.)

Cas clinique

Patiente de 79 ans

Adressée pour BAV bilatérale rapidement progressive associée à des douleurs oculaires et des céphalées plutôt temporales.

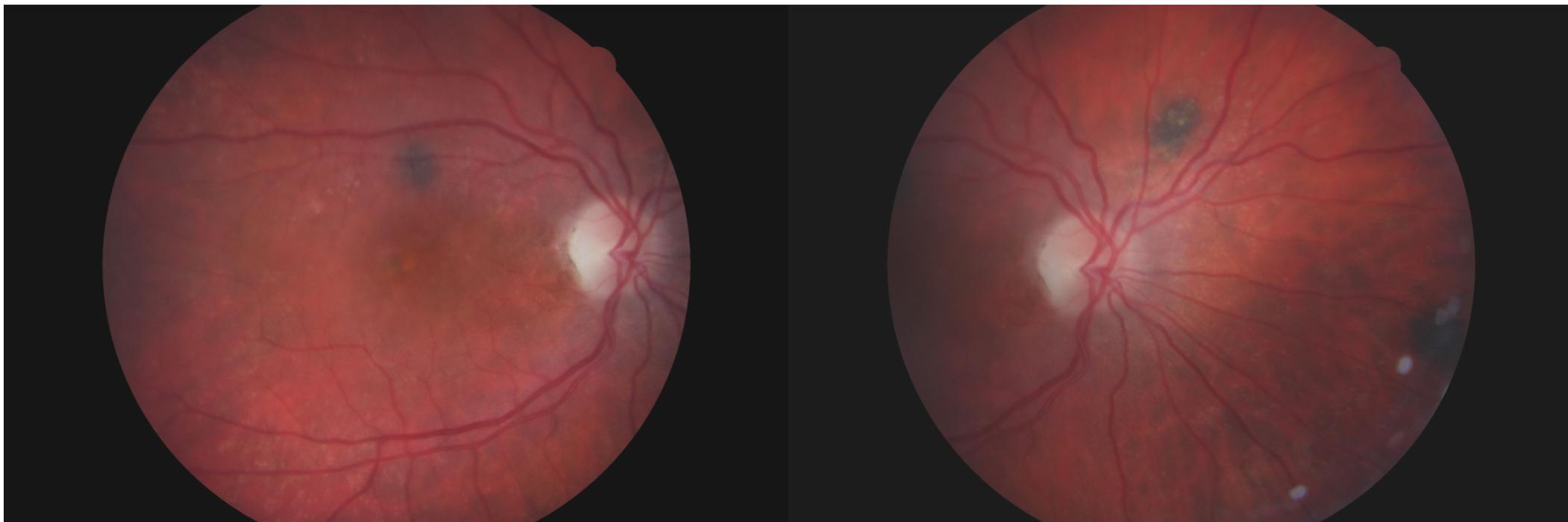
ATCD ophtalmologiques :

Chirurgie de la cataracte bilatérale non compliquée (2012)

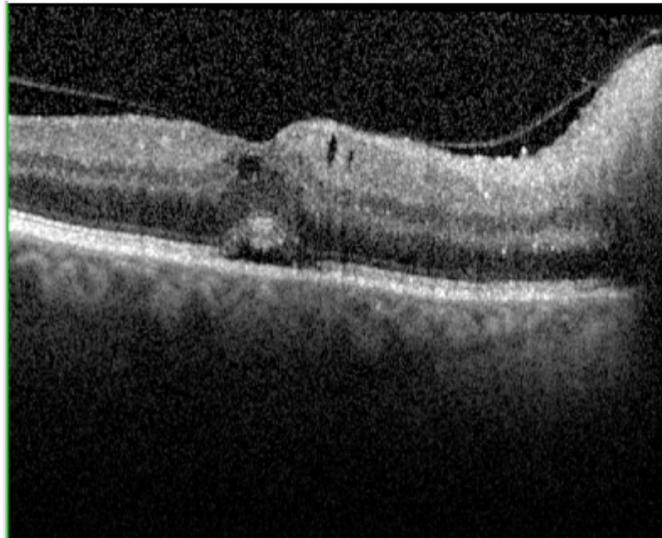
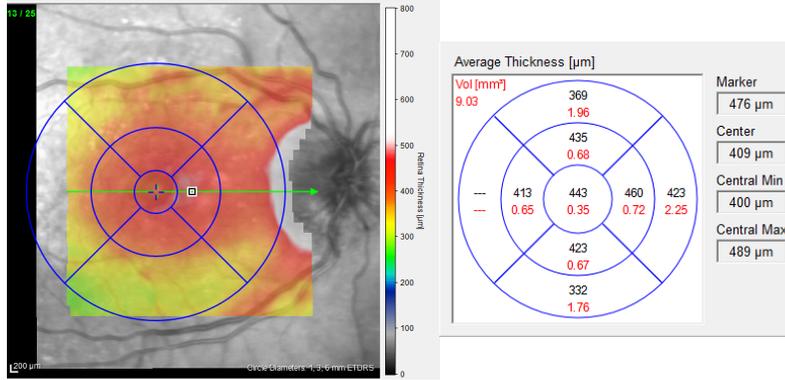
Examen OPH initial

OD		OG
1,5/10	AV	1/10
12	PIO	11
PRD granulomateux Tyndall x Pas de SIC ICP Pannus sup + inf sur blépharite	LAF	PRD granulomateux Tyndall ½ x Pas de SIC ICP Pannus sup + inf sur blépharite
16 ph/ ms	Flare	88 ph / ms
Œdème papillaire avec papille pâle, Sans hémorragie Pas de hyalite Pas de foyer	FO	Papille normale Pas de hyalite Pas de foyer

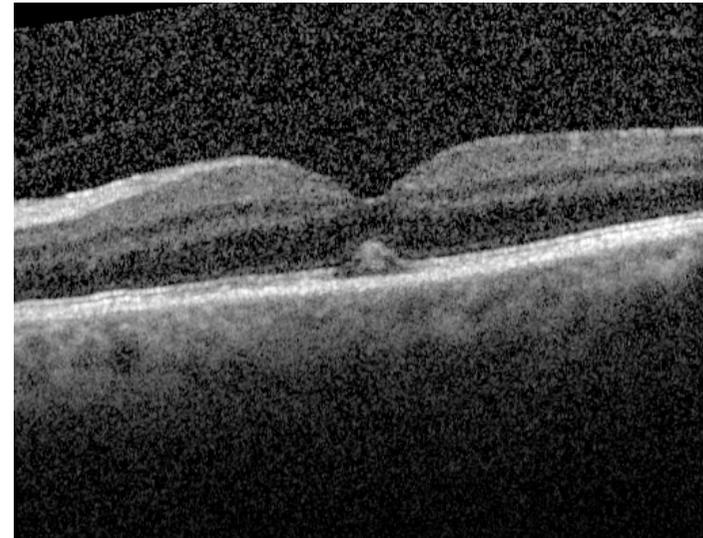
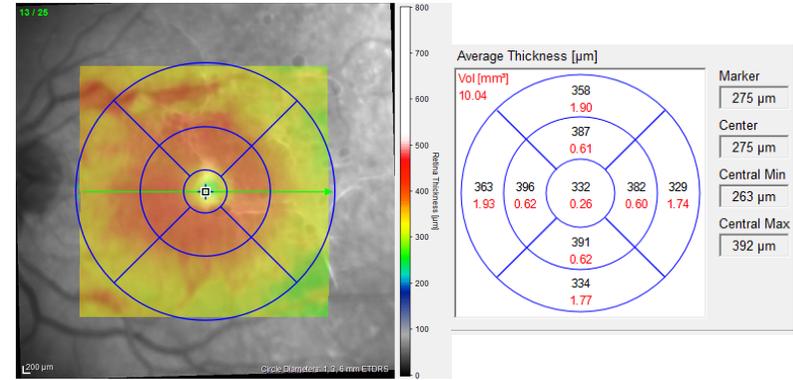
OD



OD



OG



Uvéite antérieure aiguë bilatérale
complicquée d'œdème maculaire et d'œdème papillaire à droite

- Hypothèses :
 - NOIAA dans le cadre d'une maladie de Horton ?
 - Uvéopapillite infectieuse (Lyme ?) ou inflammatoire
 - Bilan biologique et examens complémentaires : négatifs, sauf VS = 120
 - Angiographie :
 - OD= œdème papillaire et œdème maculaire, pas de vascularite
 - OG= Initialement pas d'anomalie retrouvée
- Traitement initial : corticothérapie (maladie de Horton ?)

Médecine interne

ATCD

- Arthrose
- Dyslipidémie
- Ostéoporose
- Cancer du col de l'utérus en 2011
 - Hystérectomie totale
 - Chimiothérapie

Hernie discale opérée

Bilan uvéo-papillite bilatérale

OPH => NOIAA, Uvéo-papillite infectieuse

Pas de signe clinique pour un Horton

BAT négative

vs 120 mais CRP 20 mg/L

Bilan infectieux négatif

ECA négative, BGSA normale

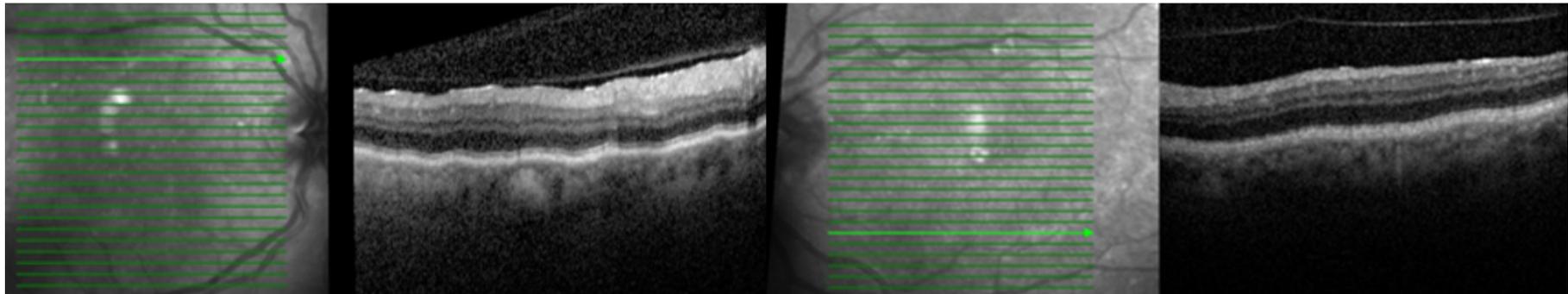
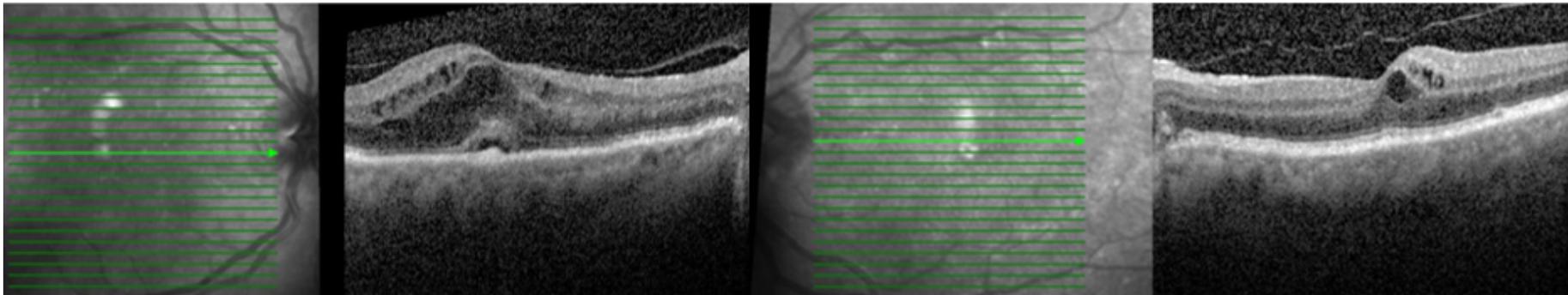
PL normale

TDM thoracique normal

=> CTC 1 mg/kg (NOIAA, Horton ?) avec amélioration rapide

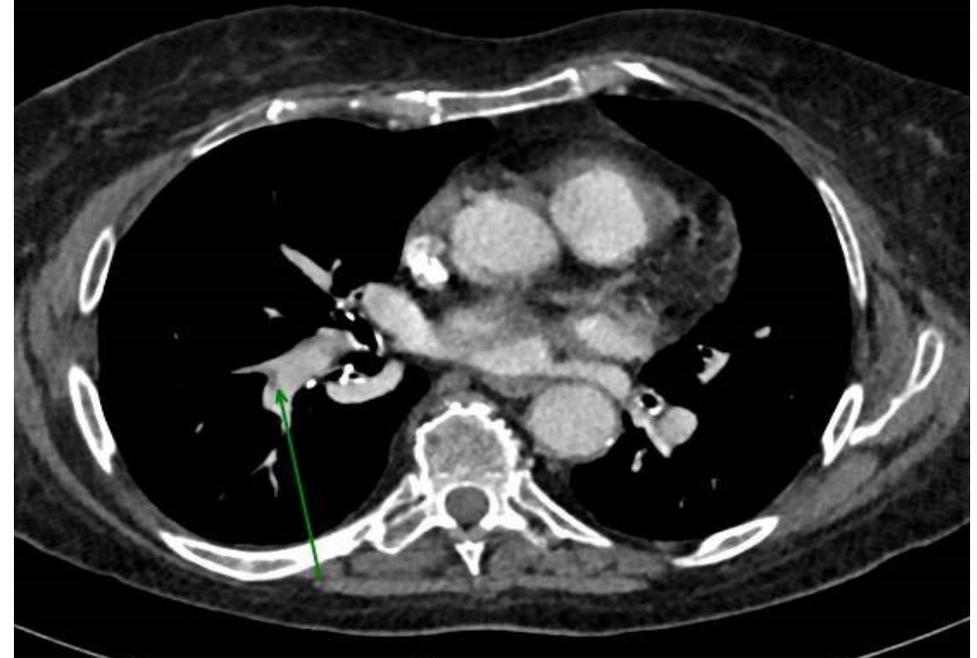
Evolution

- Récidives de poussées inflammatoires avec œdème maculaire ODG répondant aux injections sous-ténoniennes de Kénacort puis intra-vitréennes d'Ozurdex



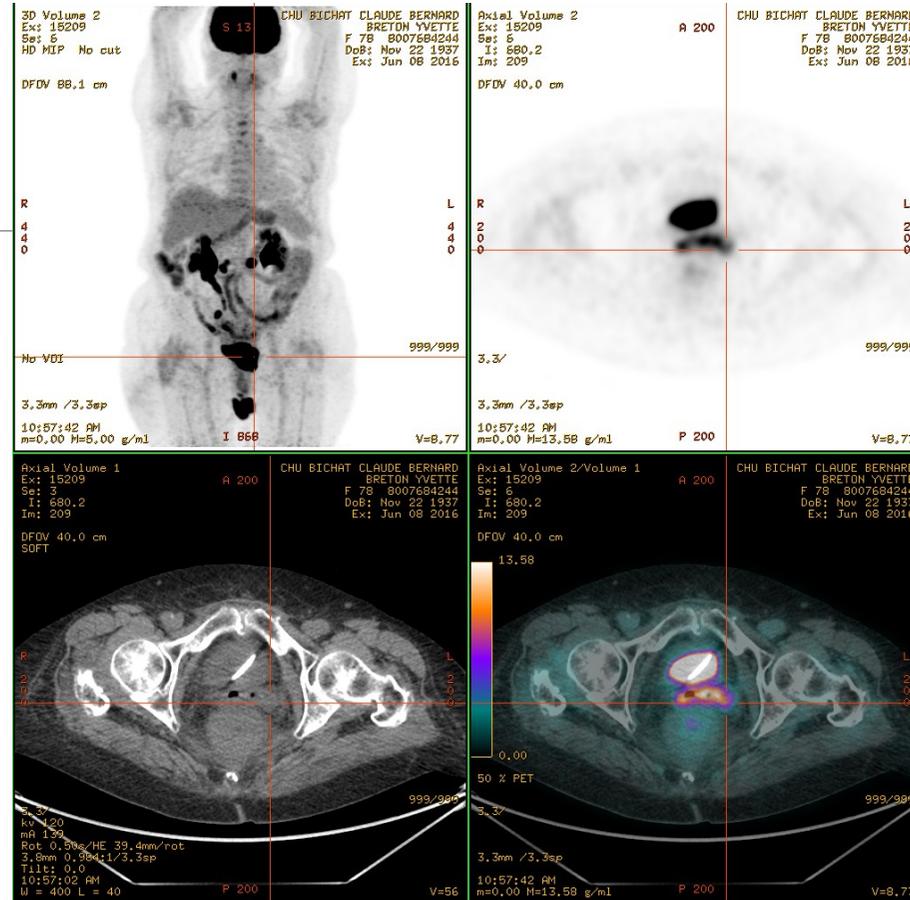
6 mois plus tard

- Altération état général -10 kg
- Syndrome inflammatoire biologique
- Dyspnée
- Angio-TDM : embolie pulmonaire



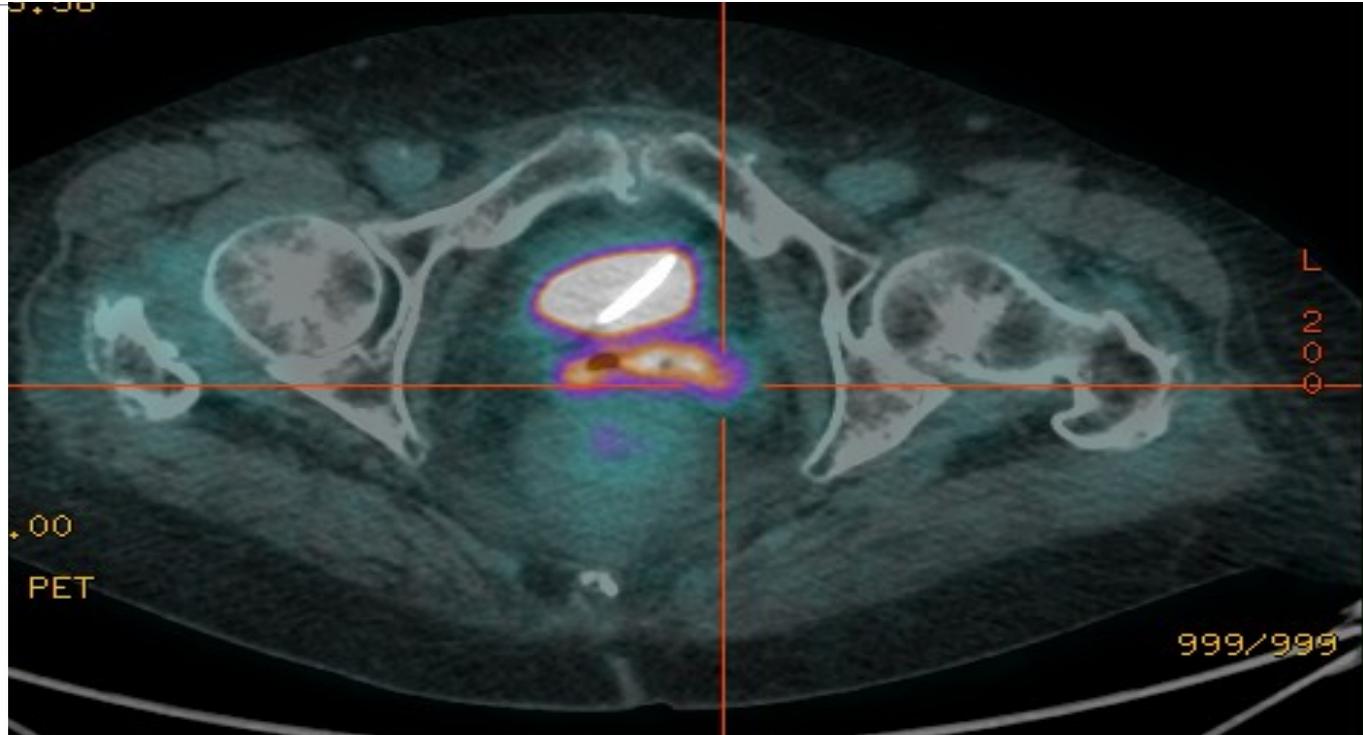
Néoplasie ?

PET-TDM



Hypermétabolisme partie proximale du vagin (SUVmax15) et ADP latéro-aortiques (SUVmax 9) et bifurcation iliaque (SUVmax 11,5)

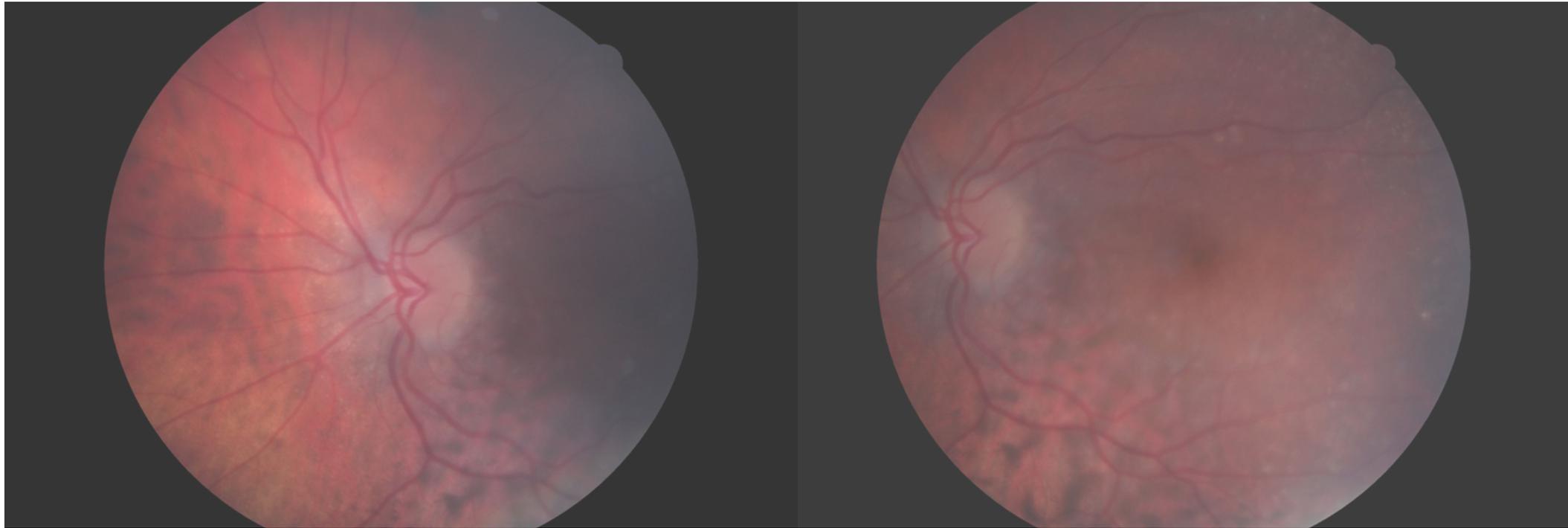
Biopsie vaginale



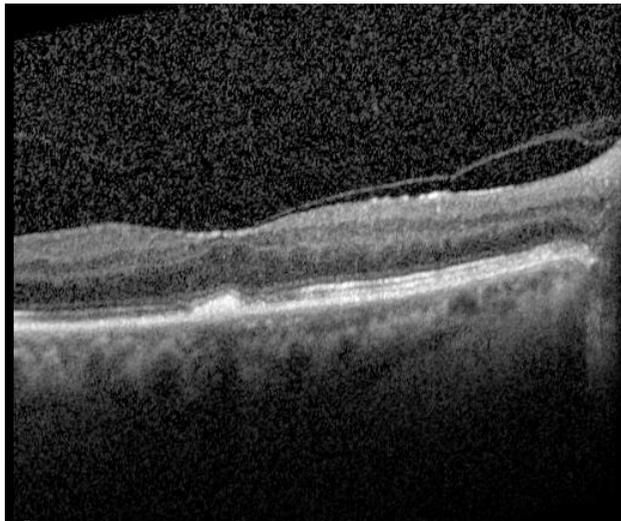
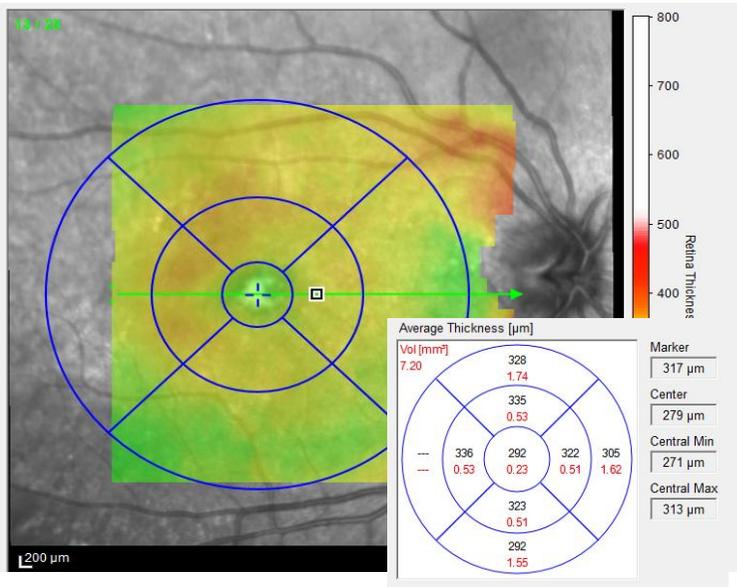
Récidive d'un carcinome du col utérin

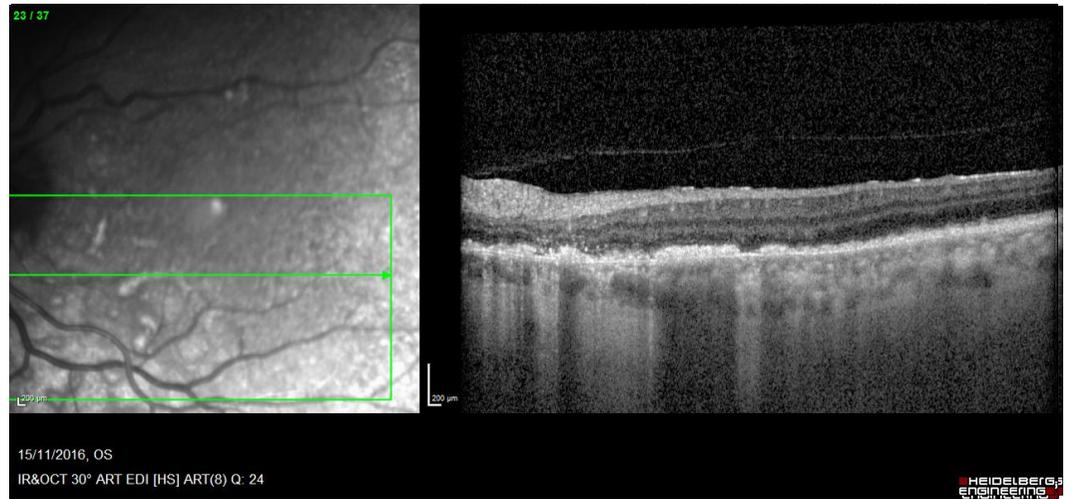
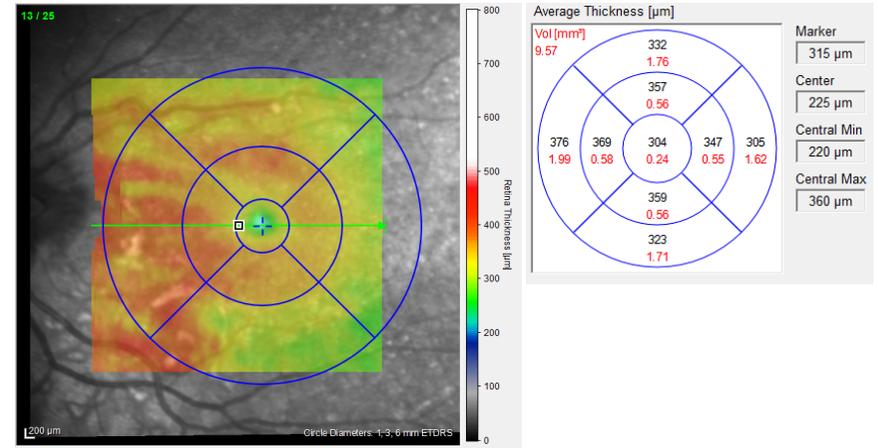
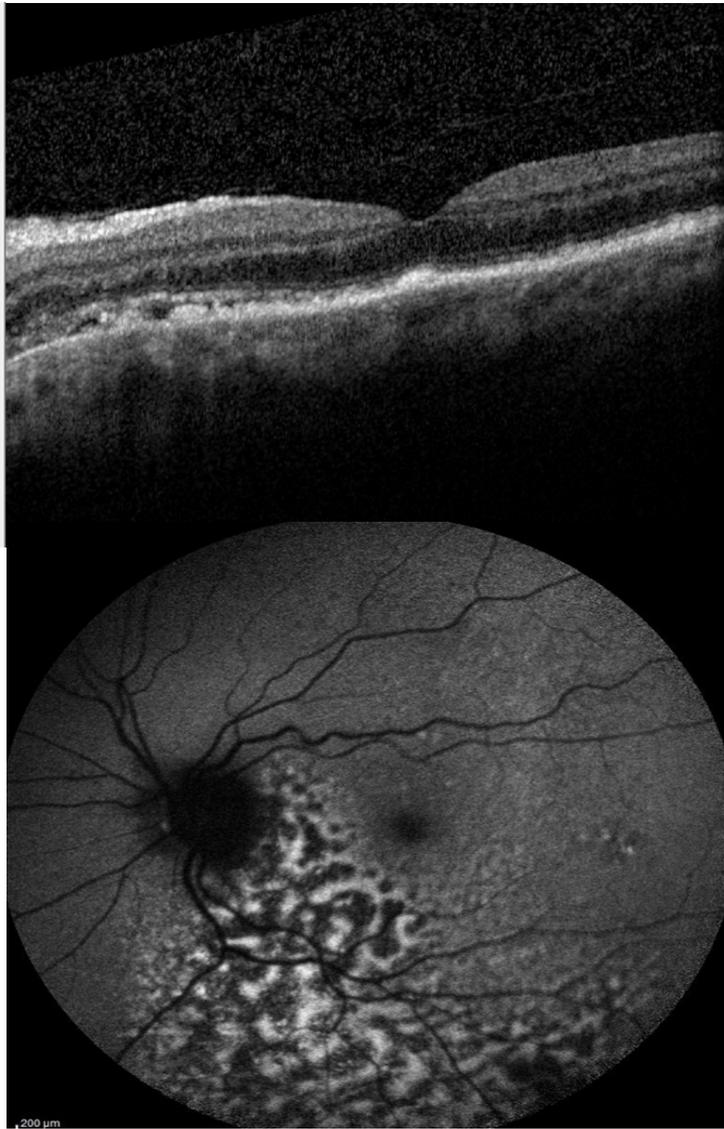


OG

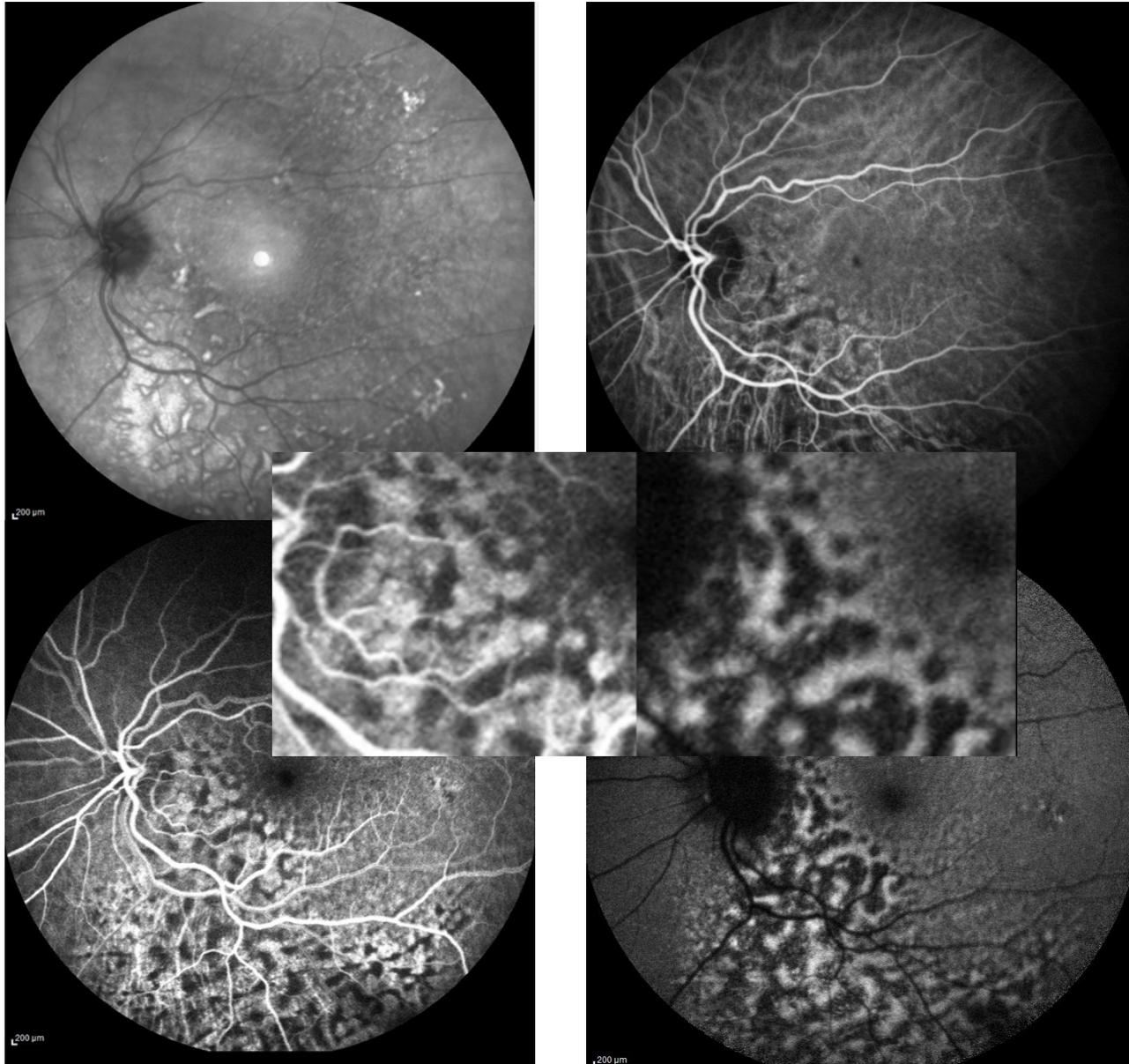








OG



Quelles sont vos nouvelles hypothèses diagnostiques ?

Lymphome ?

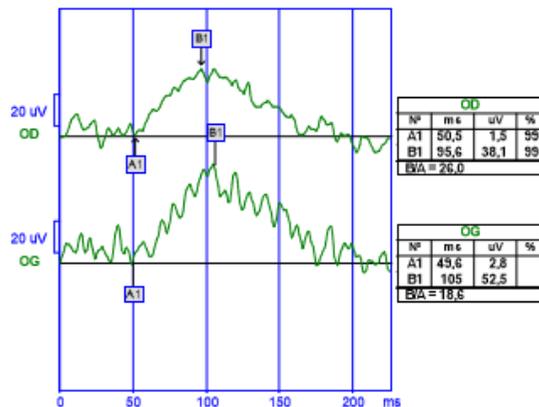
Cancer Associated Retinopathy ?

Métastase ?

EXAMEN D'ELECTROPHYSIOLOGIE VISUELLE

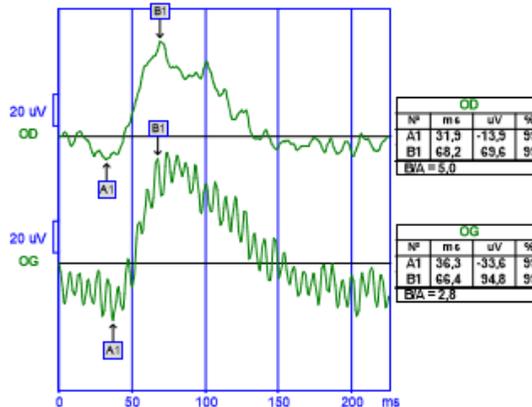
ERG des bâtonnets (-25dB) 11mn 12s Val= 8 Rej= 0

Bi stimulé



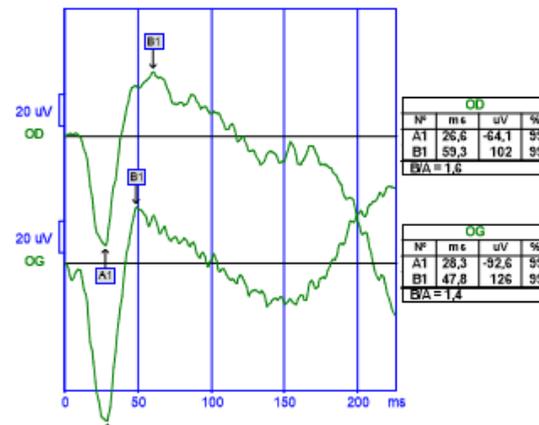
ERG mixte: (-15dB) 12mn 8s Val= 8 Rej= 0

Bi stimulé



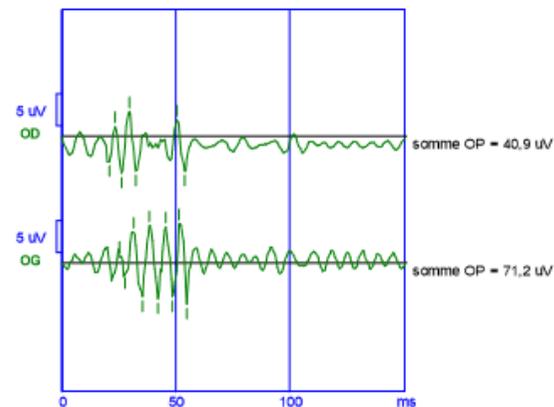
ERG mixte: cônes +bâtonnets 13mn 58s Val= 8 Rej= 0

Bi stimulé



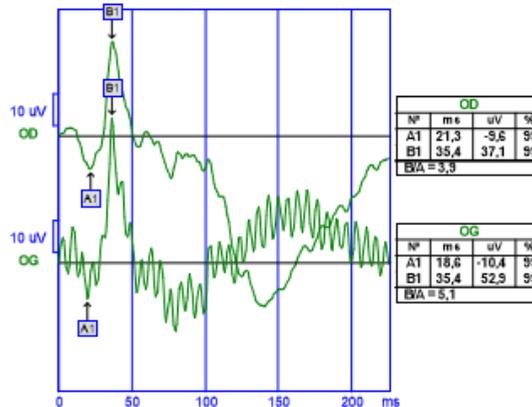
ERG potentiels oscillatoires 15mn 15s Val= 8 Rej= 0

Bi stimulé



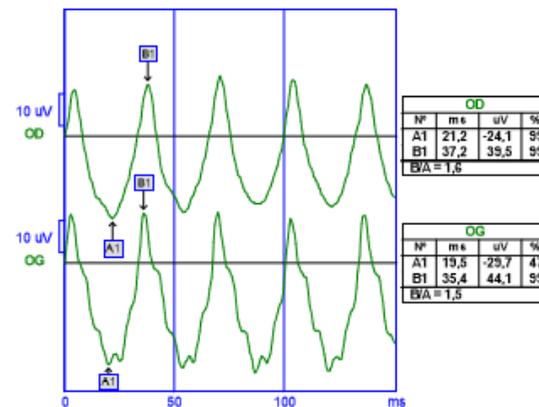
ERG des cônes: flash blanc 22mn 40s Val= 30 Rej= 0

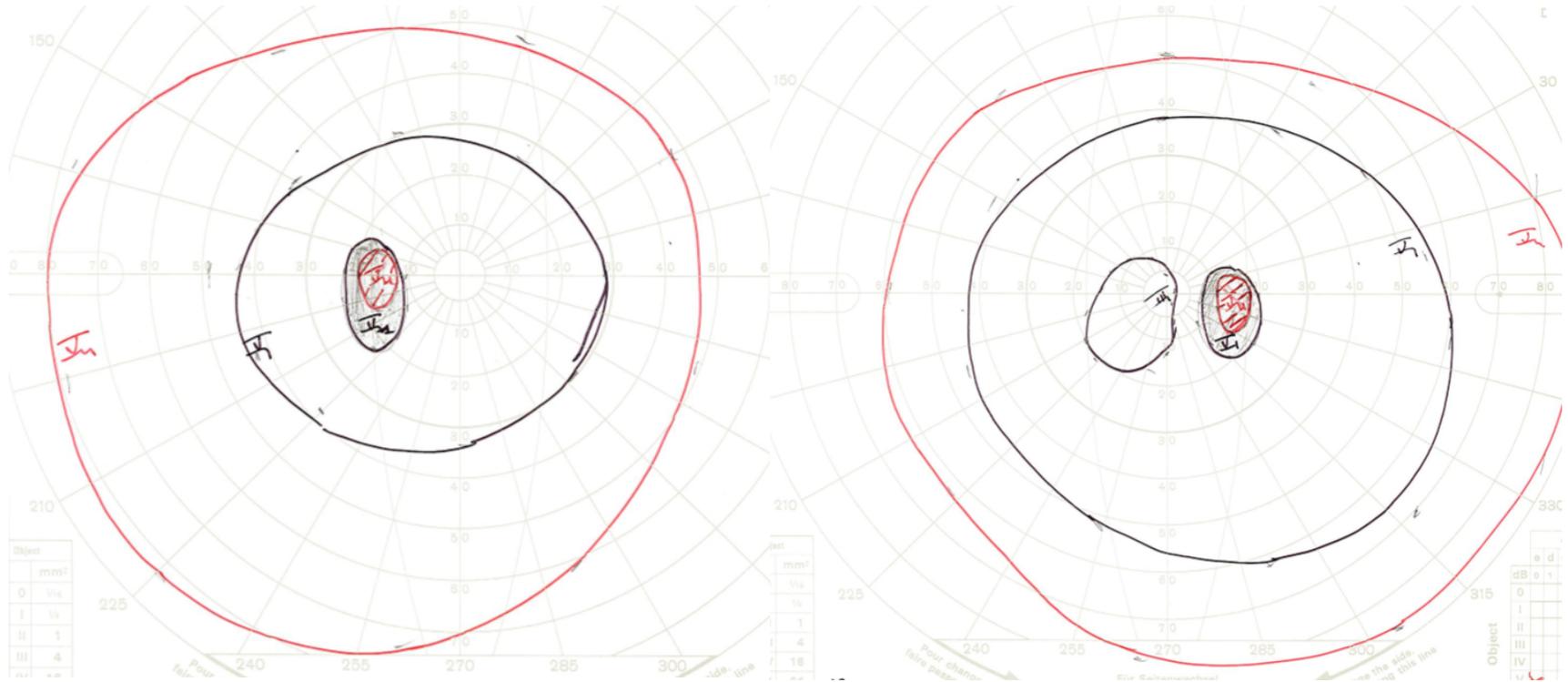
Bi stimulé



ERG des cônes: flicker 30Hz 23mn 13s Val= 30 Rej= 0

Bi stimulé



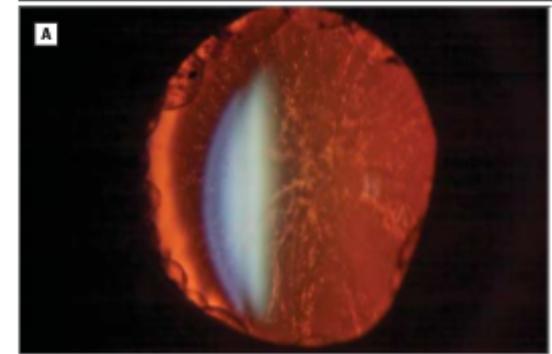


- Echographie B : Pas de masse choroïdienne, augmentation épaisseur choroïdienne

DIAGNOSTIC ?

*Bilateral Diffuse Uveal
Melanocytic Proliferation*
« BDUMP »

- Syndrome paranéoplasique pouvant précéder le cancer de 3-12 mois
- BAV bilatérale rapidement progressive
- Prolifération de mélanocytes au niveau de la choroïde ; provoquant une déstructuration de l'EP et de la rétine externe
- Cataracte sous capsulaire postérieure d'évolution rapide
- Au FO : lésions tachetées, multiples, orange, polygonale : « giraffe pattern »



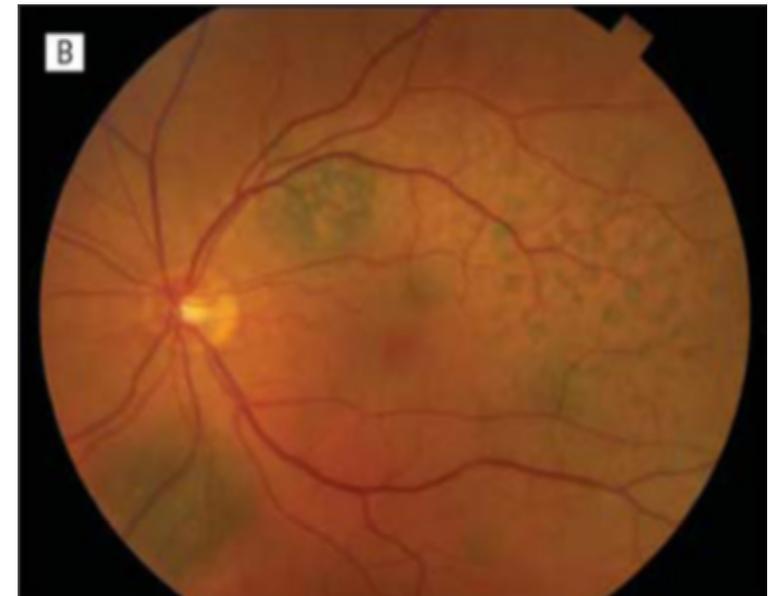
naevi
DSR

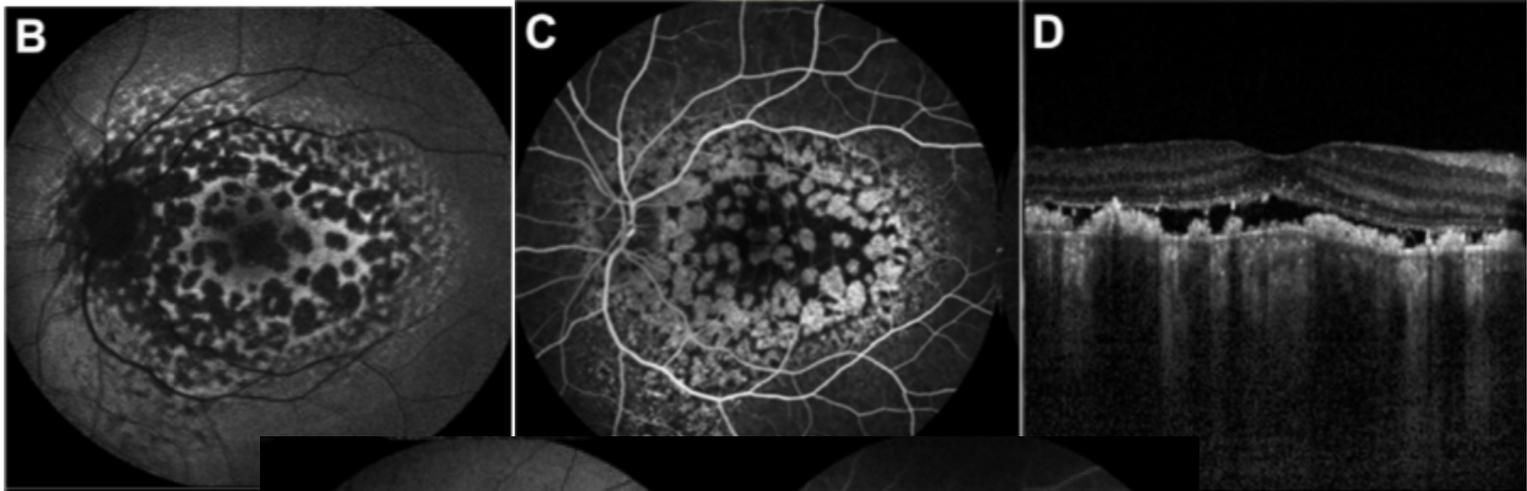
Ophthalmology, 2016

Arch ophthalmol, 2011



JAMA Ophthalmol, 2014

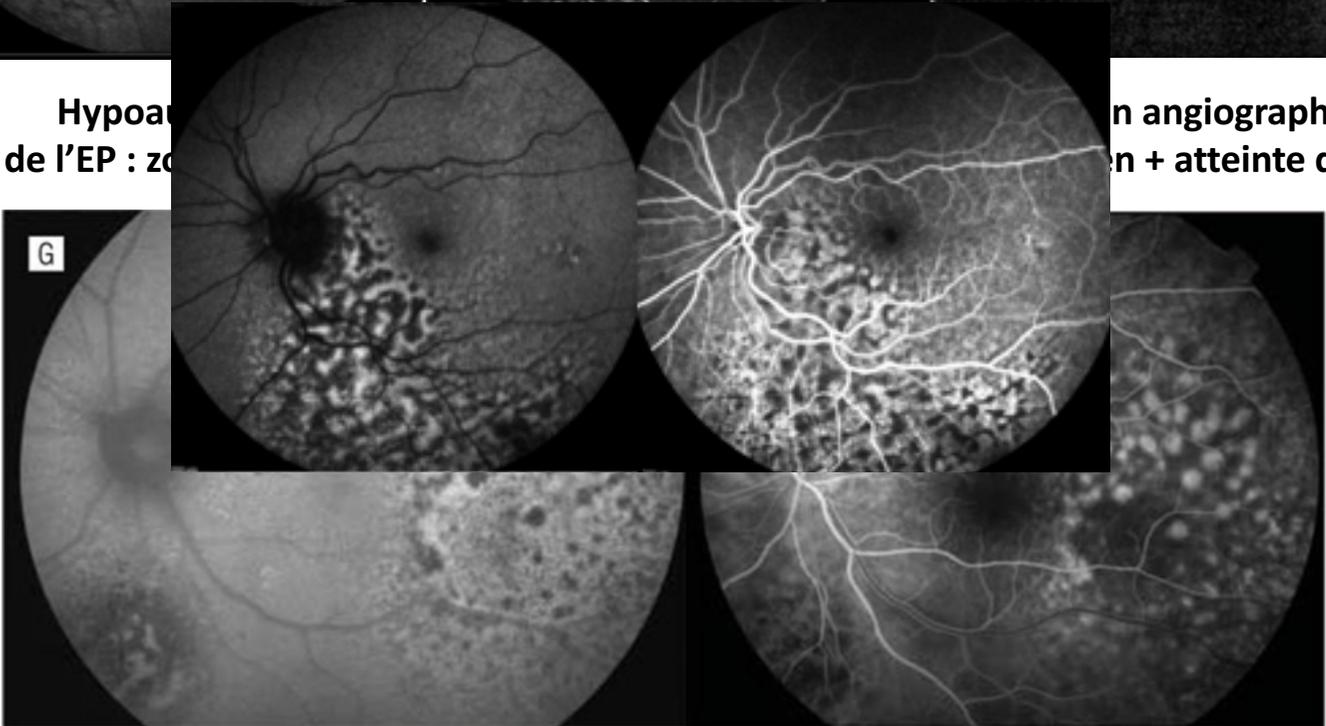




Ophthalmology, 2016

Hypoa...
 OCT: atteinte de l'EP : z...

...n angiographie
 ...n + atteinte de la rétine externe



Arch Ophthalmol, 2011

Physiopathologie : Inconnue !

**A FACTOR FOUND IN THE IgG FRACTION
OF SERUM OF PATIENTS WITH
PARANEOPLASTIC BILATERAL DIFFUSE
UVEAL MELANOCYtic PROLIFERATION
CAUSES PROLIFERATION OF CULTURED
HUMAN MELANOCYTES**

RETINA 32:1959-1966, 2012

Thérapeutique :

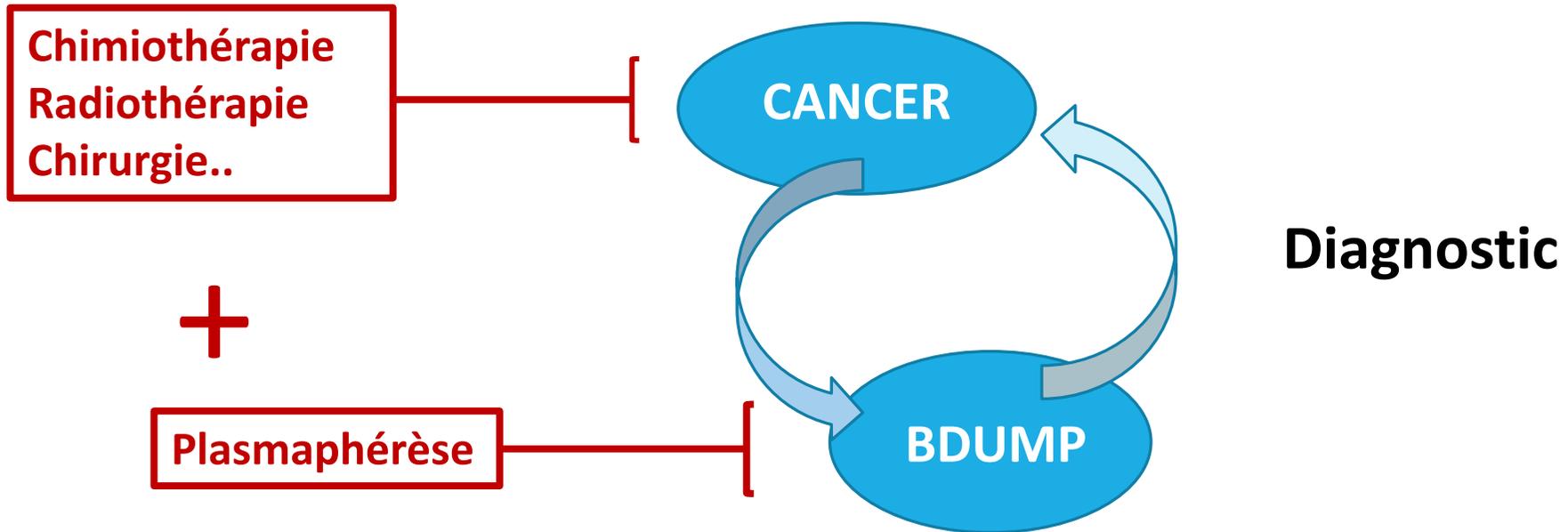
**Early diagnosis and successful treatment
of paraneoplastic melanocytic proliferation**

Br J Ophthalmol 2015,

Bilateral diffuse uveal melanocytic proliferation: Case report and literature review

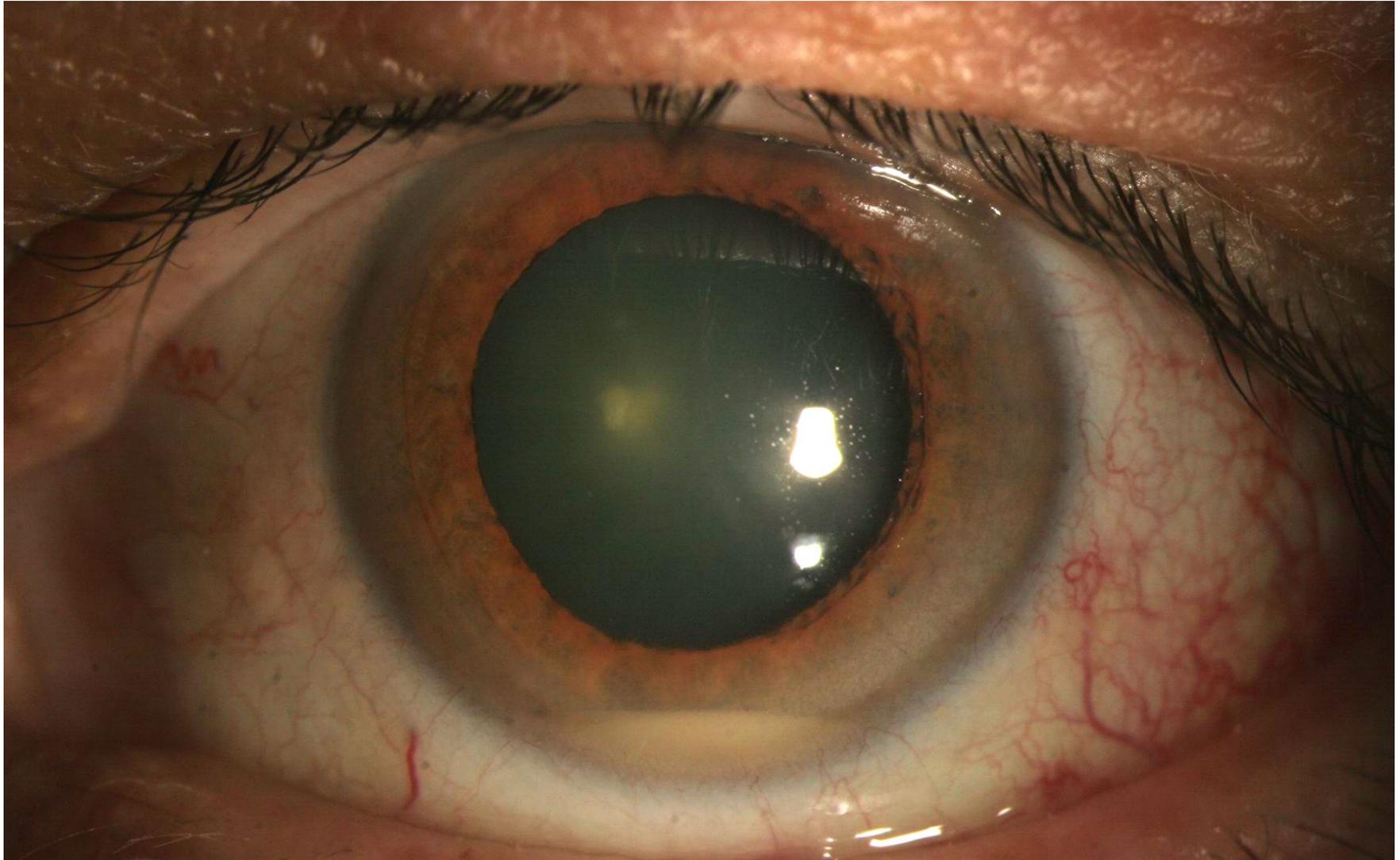
Kristian Klemp,¹  Jens Folke Kiilgaard,¹  Steffen Heegaard,^{1,2}  Tove Nørgaard,³
Mette Klarskov Andersen⁴ and Jan Ulrik Prause²

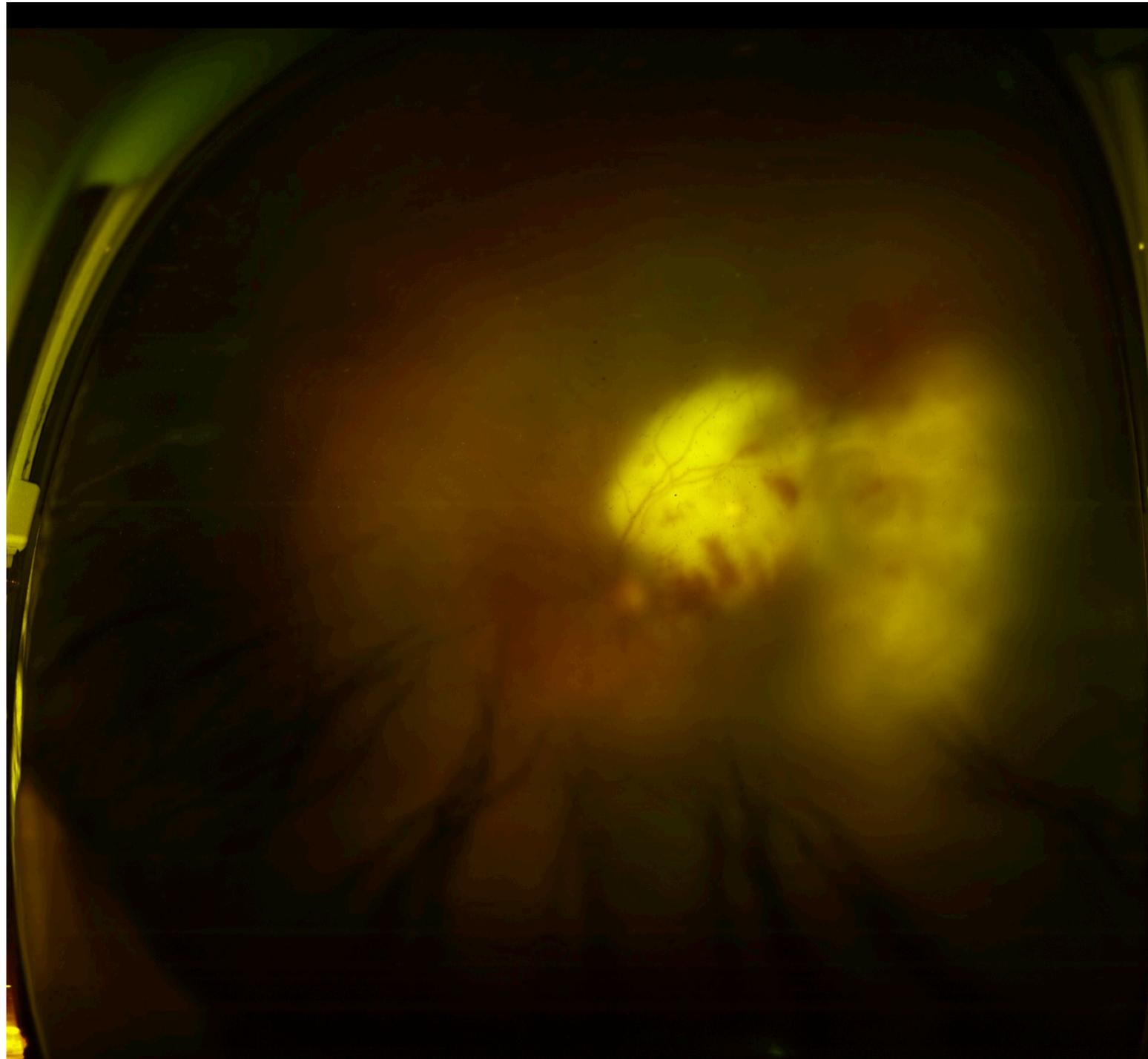
Bilateral diffuse uveal melanocytic proliferation (BDUMP) is a rare paraneoplastic intraocular disease that causes progressive visual loss in patients driven by an IgG factor associated with an underlying malignancy. Characteristic ocular findings include exudative retinal detachment, rapid cataract formation and uveal melanocytic tumours. The awareness and documentation of BDUMP has increased during the past decade, and the increasing amount of data collected demonstrates the effect of treatment with plasmapheresis and the value of diagnostic tools in BDUMP such as genetic and immunologic investigations. The literature of BDUMP has not been reviewed since 2003, and there is a growing need for an updated review on diagnosis and management of BDUMP. We review the literature and report a case of BDUMP with a white ciliary body tumour, iris rubeosis, increased iris pigmentation and cataract.

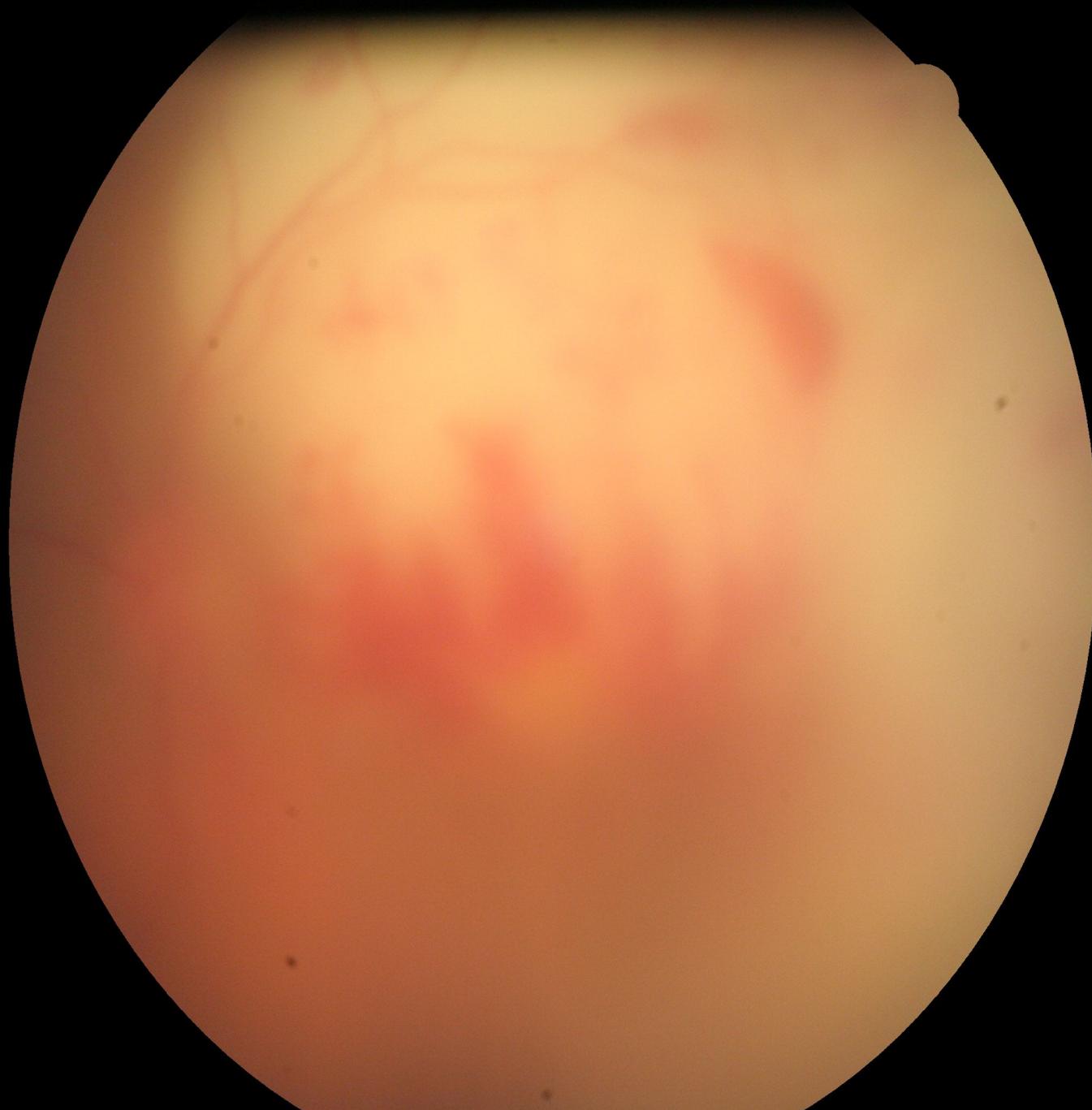


- Mauvais pronostic, médiane de SURVIE 15,6 MOIS

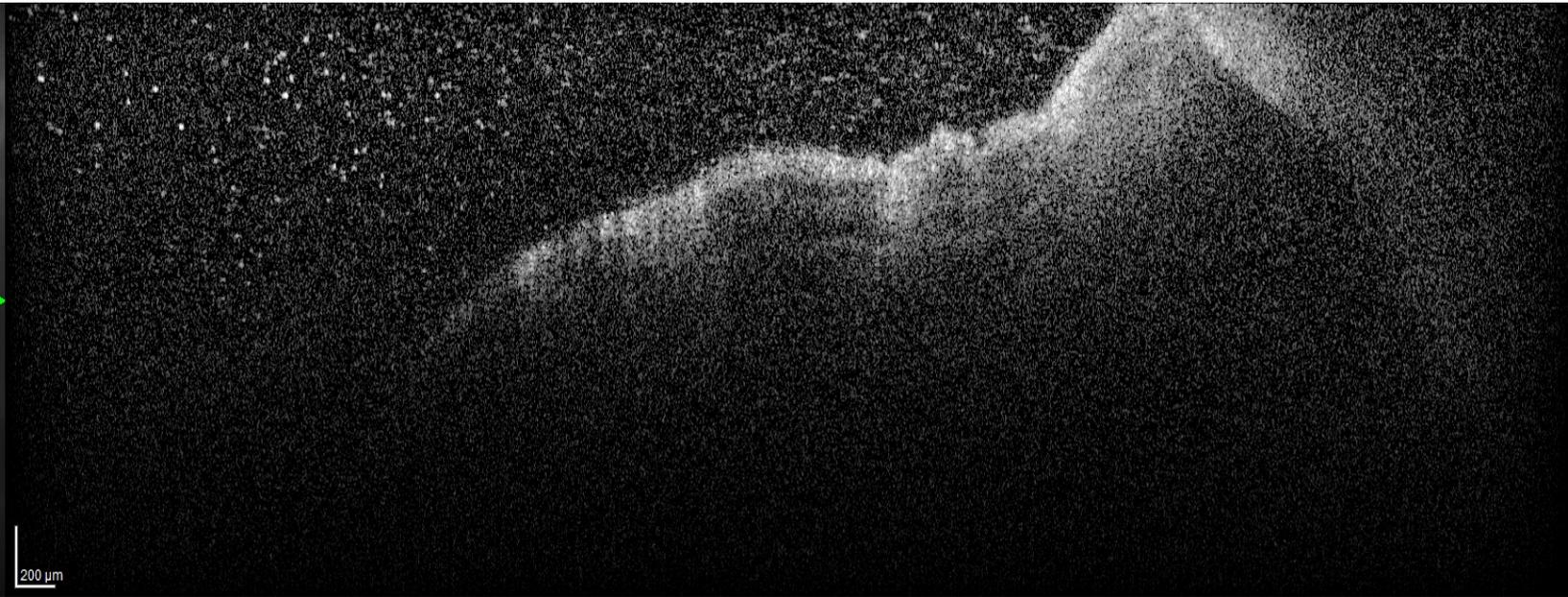
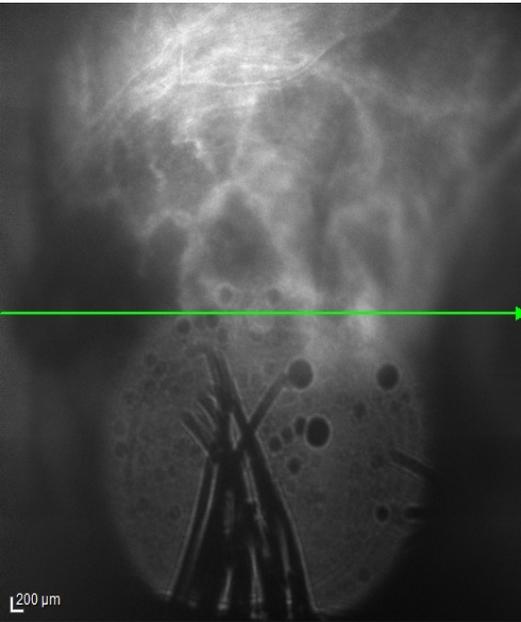
Monsieur C. 54 ans
Baisse d'acuité visuelle installée en quelques jours du côté gauche
AV OD 1,0 OG VBLM







OCT



Mr C., 54 ans

- **Contexte fébrile**

- **Importante altération de l'état général**
- **Syndrome inflammatoire biologique**

- Antécédents

- Cardiopathie ischémique, pose de *stents*
- Hypertension artérielle
- Diabète de type 2

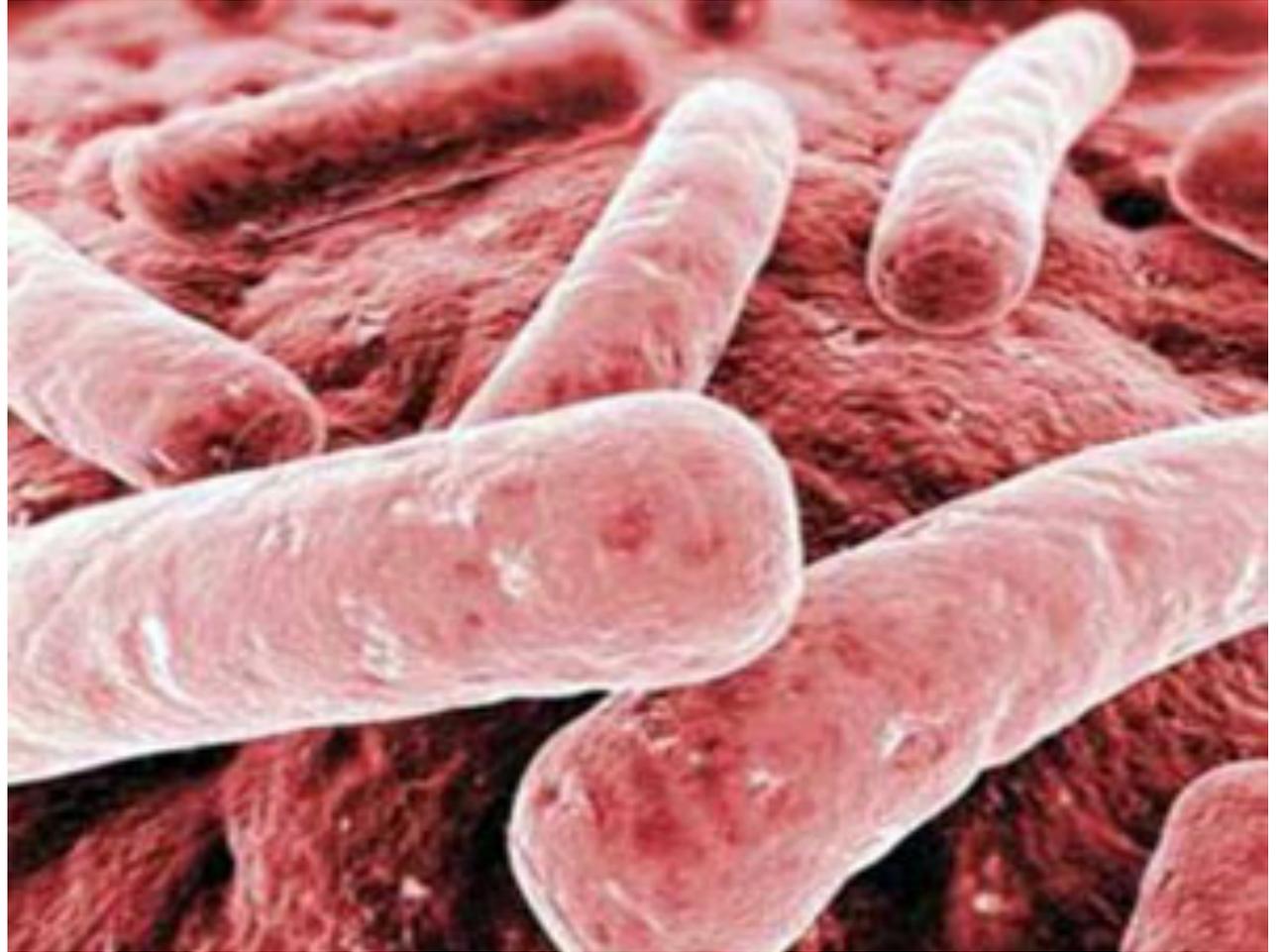
- Mode de vie

- Patient d'origine Française
- Gendarme, père de 2 enfants en bonne santé
- Pas de voyage à l'étranger

Hypothèses diagnostiques ?

Explorations complémentaires

- ECRU et Hémocultures positifs à **Klebsiella pneumoniae**



Explorations complémentaires

- ECBU et hémocultures positifs à *Klebsiella pneumoniae*
- TDM thoraco-abdomino-pelvien : multiples abcès hépatiques



L'endophtalmie à Klebsielle: vers une pandémie ?



	Durée	Lieu	Nb yeux	Klebsielles	Abcès hépatique	Diabète
Lim et al.	2005-2011	Corée	57	43%	39,5%	46,5%
Lee et al.	1996-2010	Corée	97	48,4%	25%	42,5%
Chung et al.	1993-2006	Corée	18	38,9%	/	50%
Ang et al.	1986-2007	Singapore	113	54%	77,5%	55,7%
Chen et al.	1992-2002	Taiwan	74	61%	/	/
Jackson et al.	1984-2001	Angleterre	19	5%	100%	100%
Okada et al.	1980-1990	USA	28	3,6%	/	/

Klebsiella pneumoniae hypervirulente

Fréquent en Asie du Sud-Est



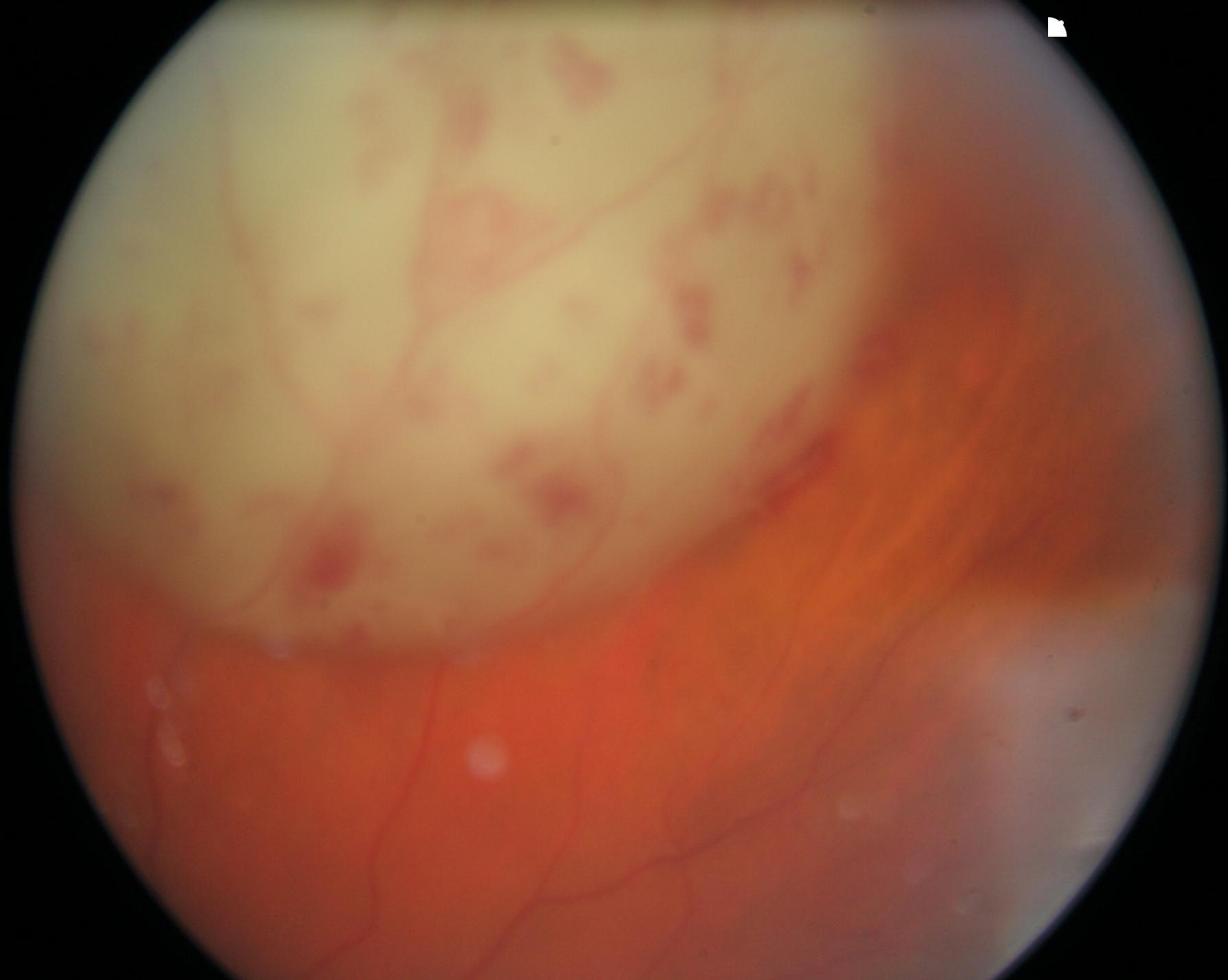
Rôle suspecté des pousses de soja

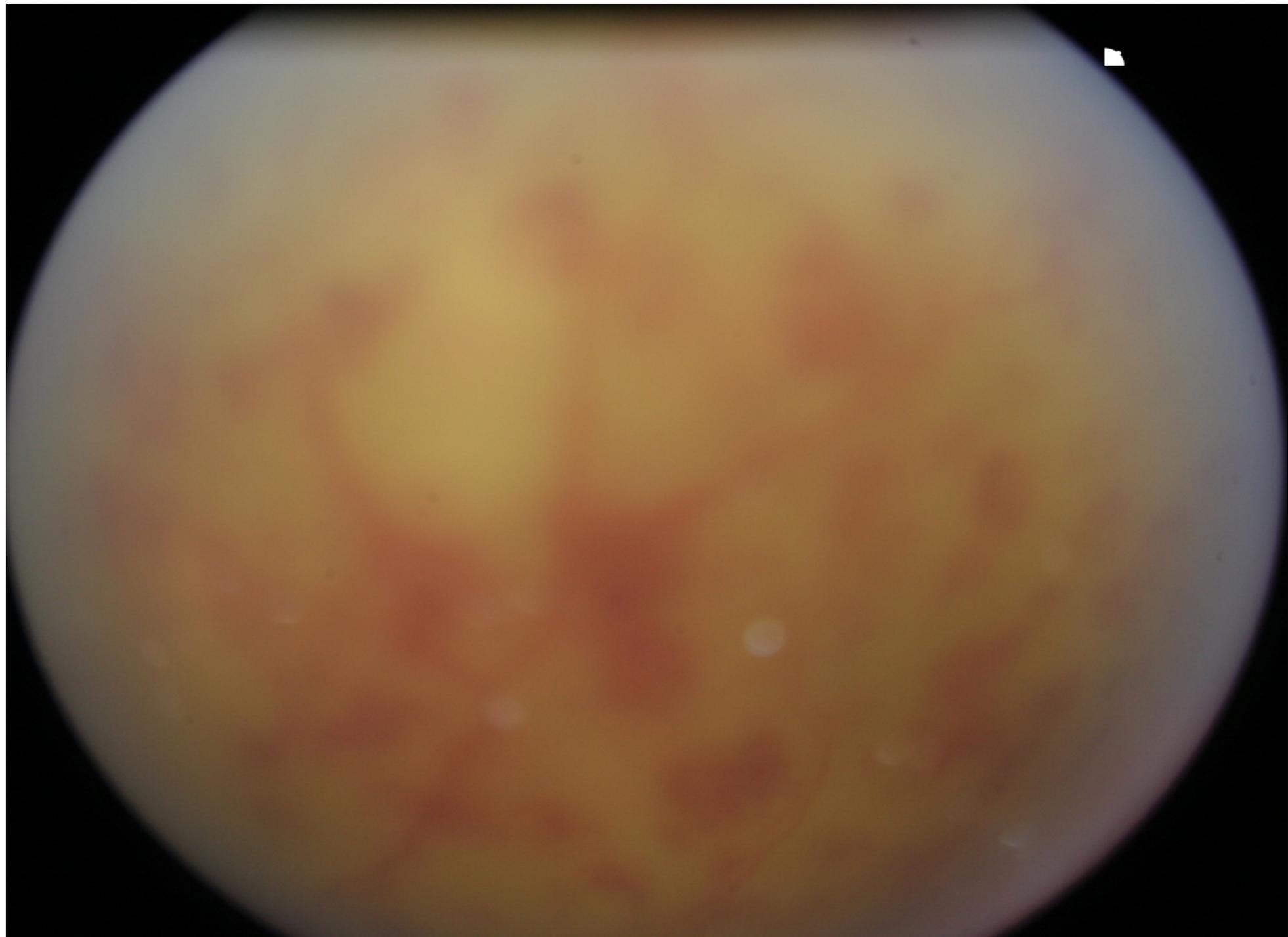


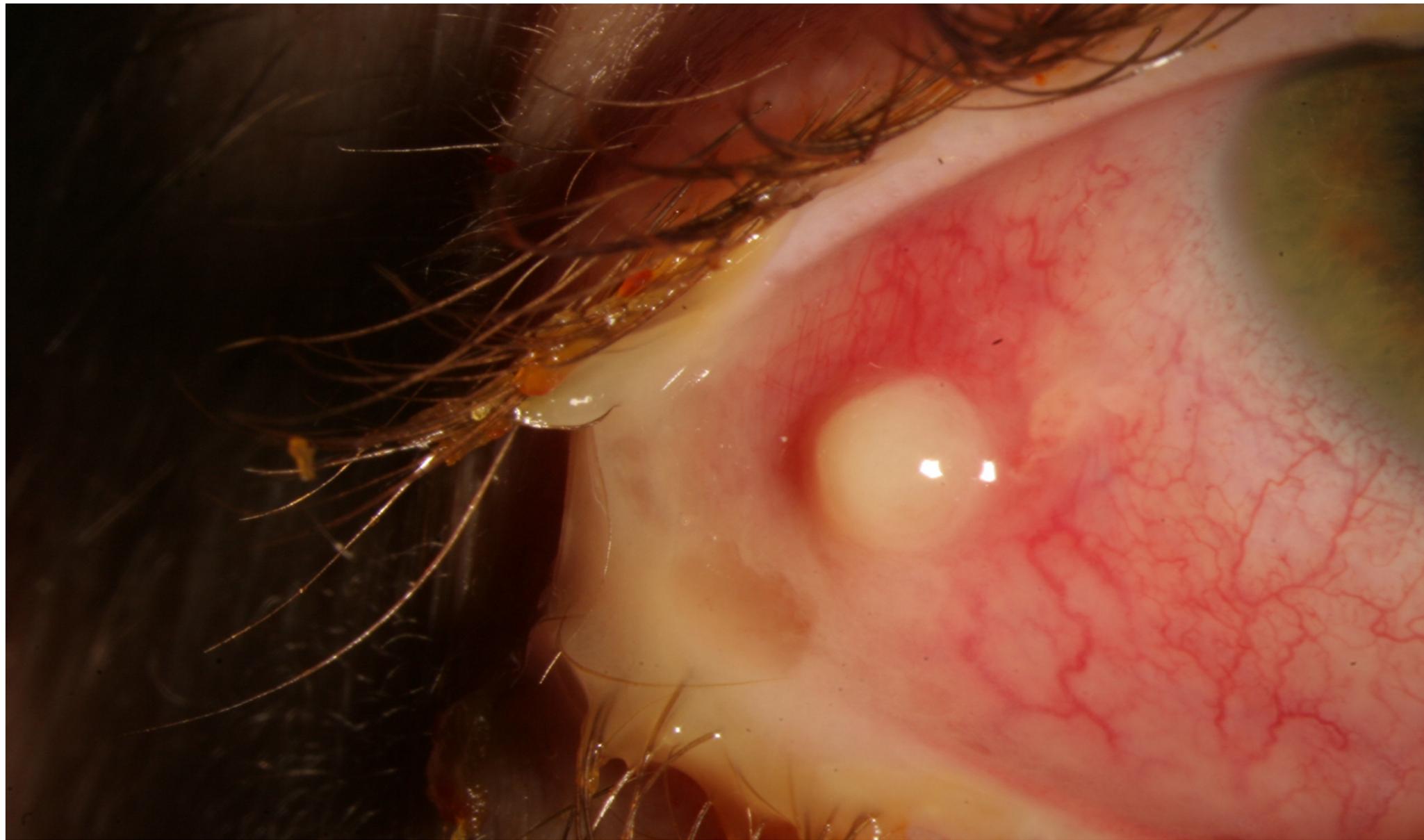
Quelques autres cas..

Endocardite Infectieuse









Mme J..., 28 ans

- **Antécédents**

- **Migraines ophtalmiques**
- **G2P1 IVG**
- **ATCD familial de SPA**

- **Mode de vie**

- **Educatrice spécialisée**
- **Vit avec son compagnon et son fils de 2 ans**
- **Tabagisme actif (<10 PA)**

- **Traitements**

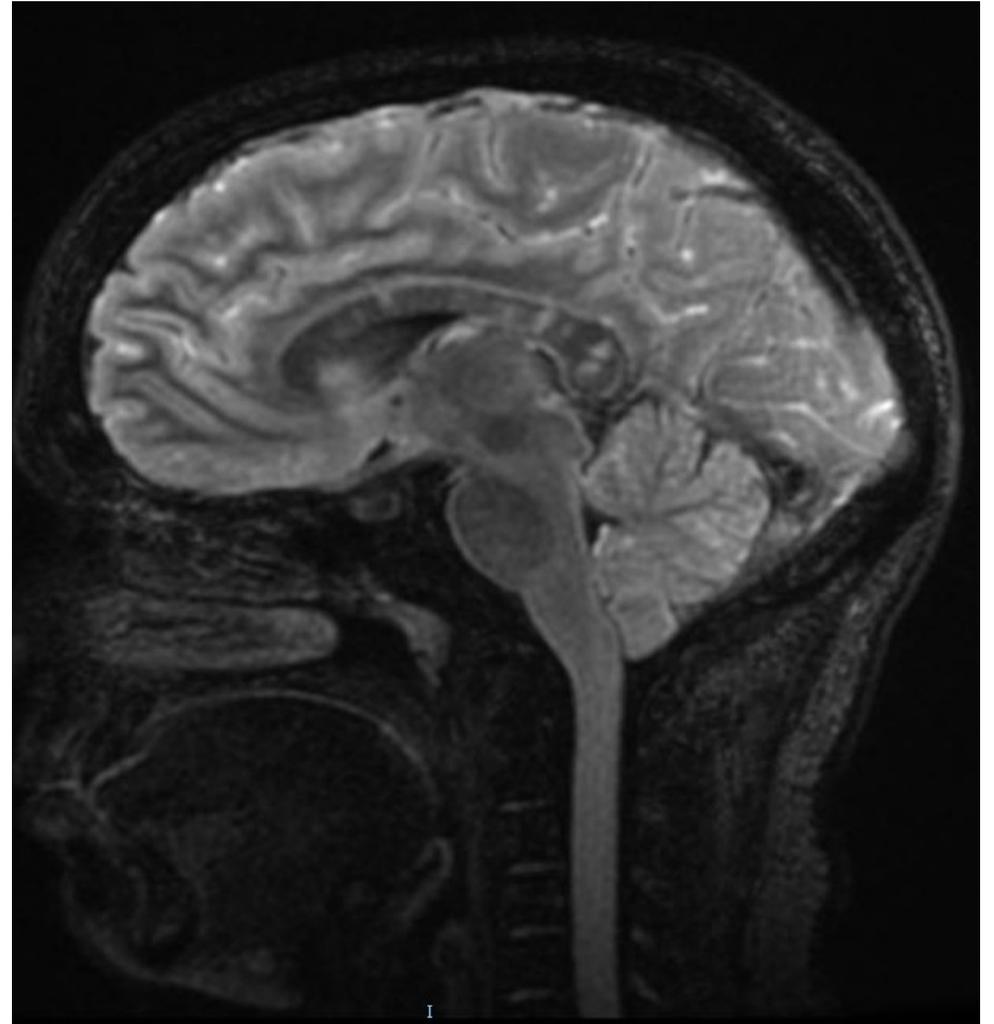
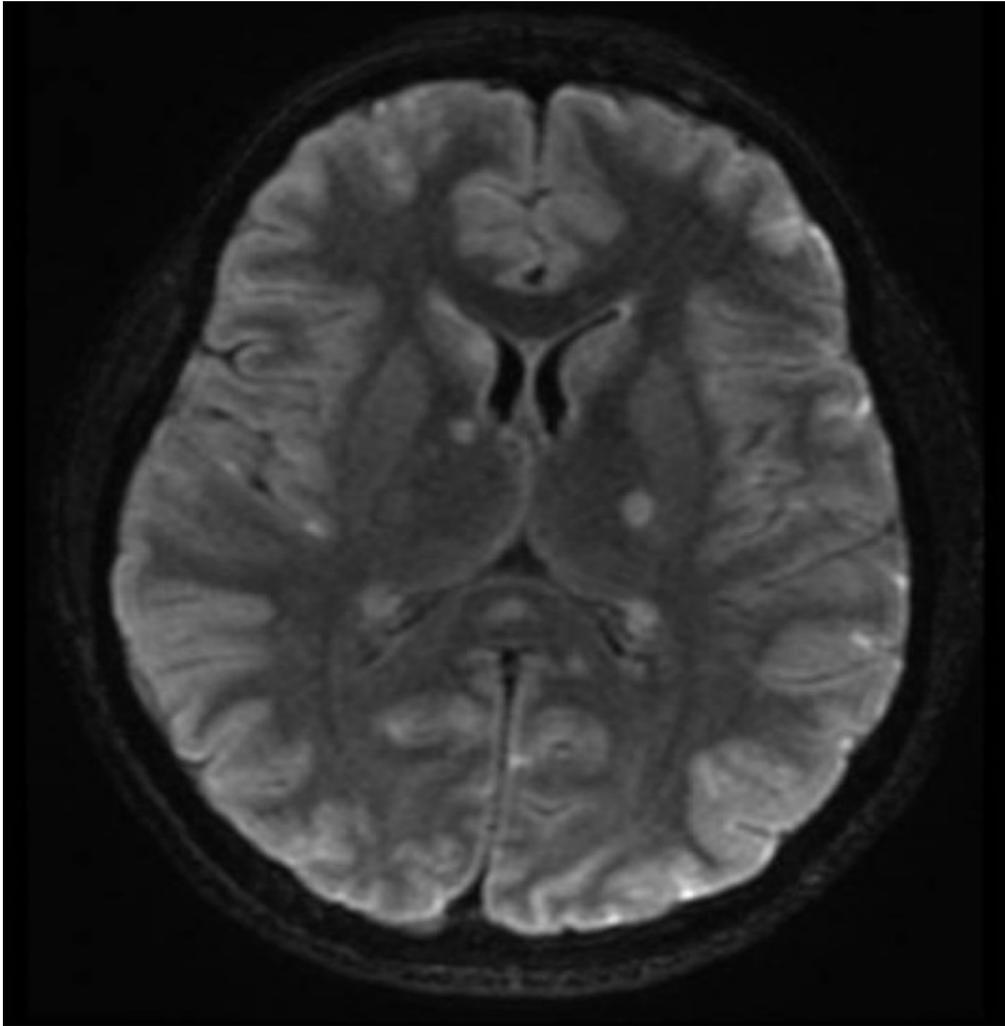
- **Contraception oestro-progestative**

Histoire de la maladie : Mars 2016

- **Vertiges**
- **Vomissements**
- **Troubles de la marche et de l'équilibre**
- **Nystagmus, Romberg**
- **ROT vifs, signe de Romberg**
- **Flou visuel**

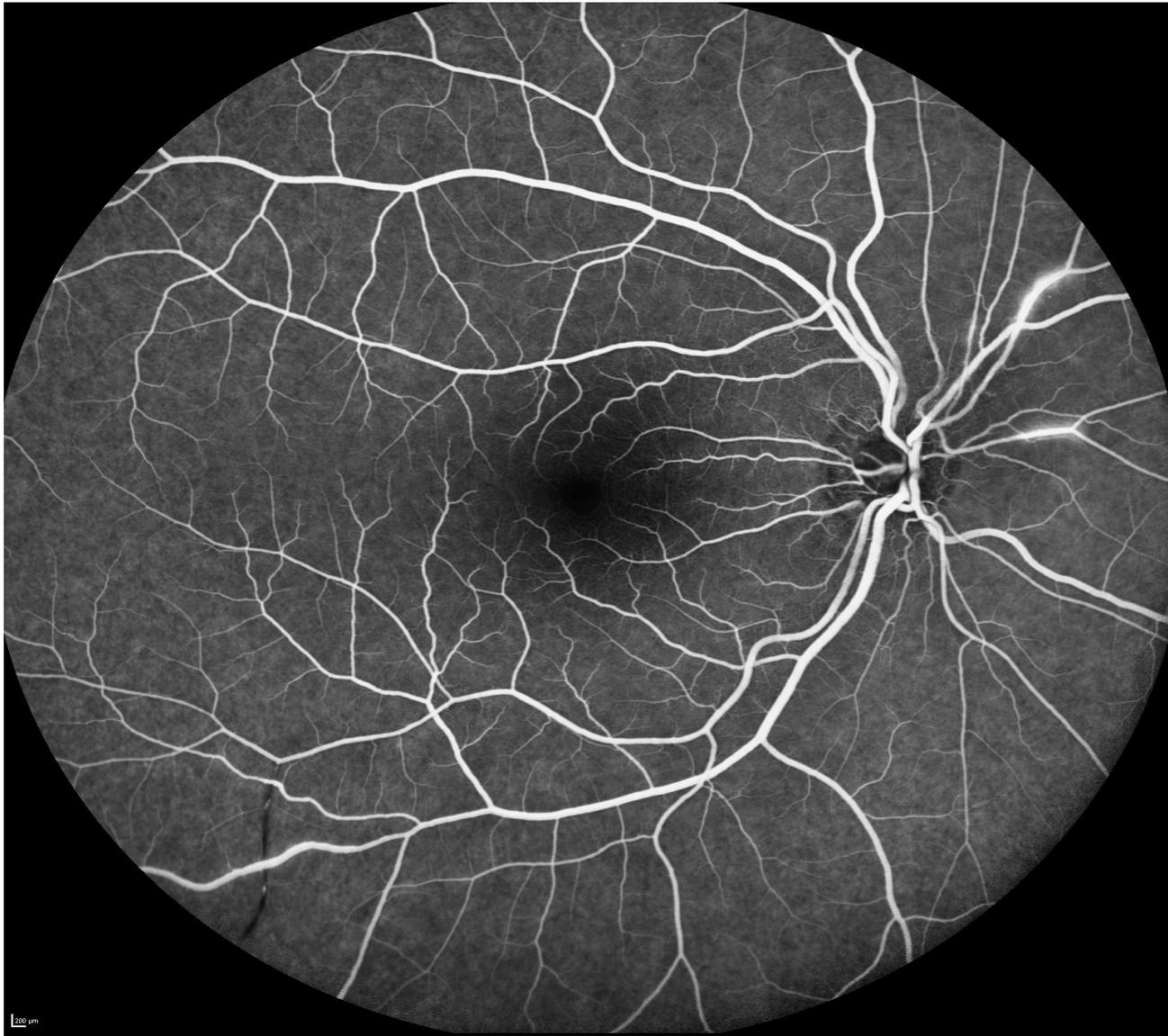
- **IRM cérébrale : lésions d'aggravation rapide**

IRM cérébrale



Explorations

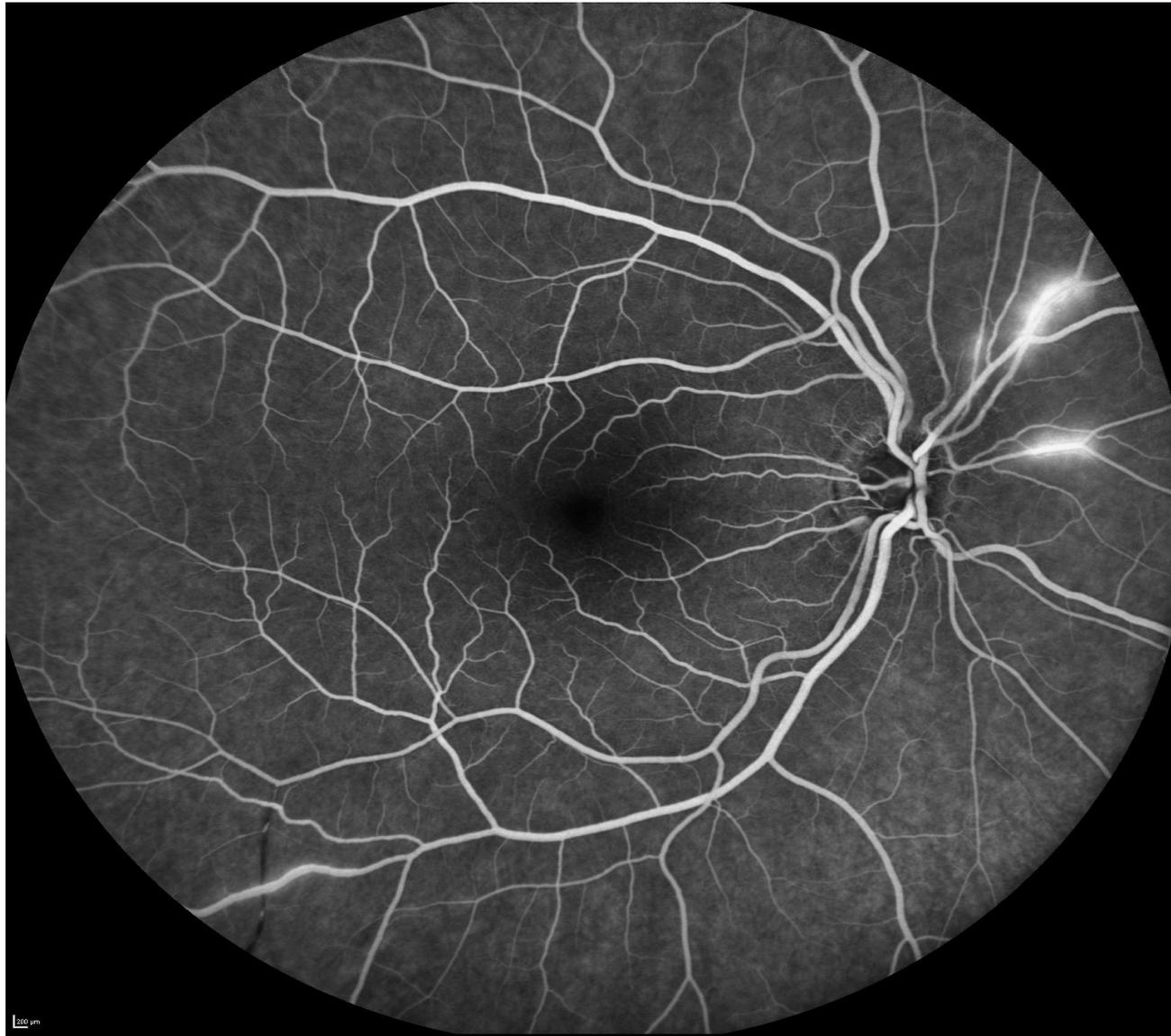
- **ANCA, FAN neg**
- **CRP normale**
- **ECA normale, BGSA négative**
- **TDM TAP normal**
- **EEG : encéphalopathie légère**
- **Ponction Lominaire**
 - **9 éléments/mm³ dont 98% de Lympho, 3 GR/mm³**
 - **Culture négative**



100 µm

16/09/2011, OD
FA 1:31.48 55° ART(17) [HR]

HEIDELBERG
ENGINEERING



100 µm

16/09/2011, OD
FA 6:31.73 55° ART(12) [HR]

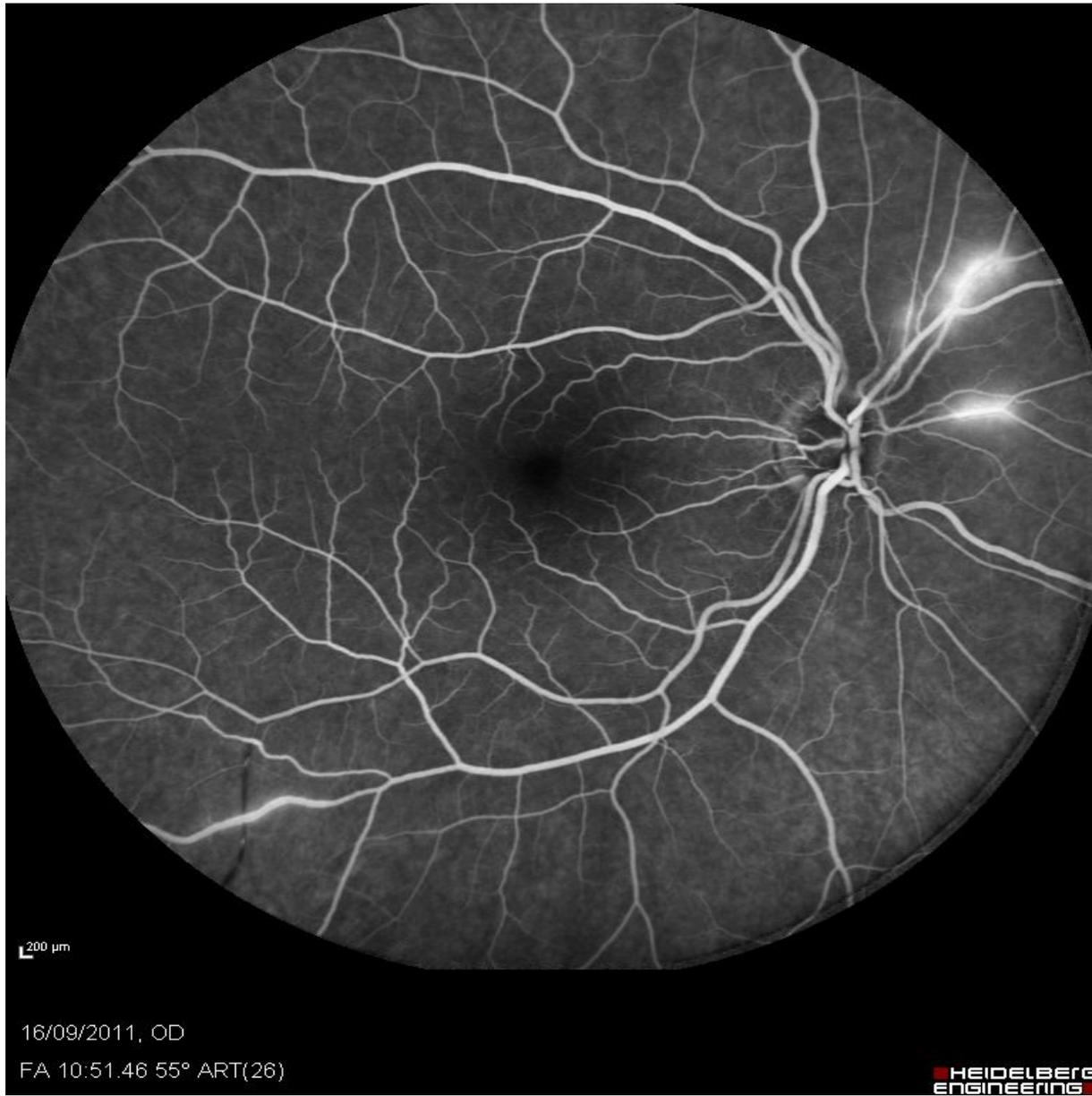
HEIDELBERG
engineering



100 µm

16/09/2011, OD
FA 6.50.16.55° ART(10) [HR]

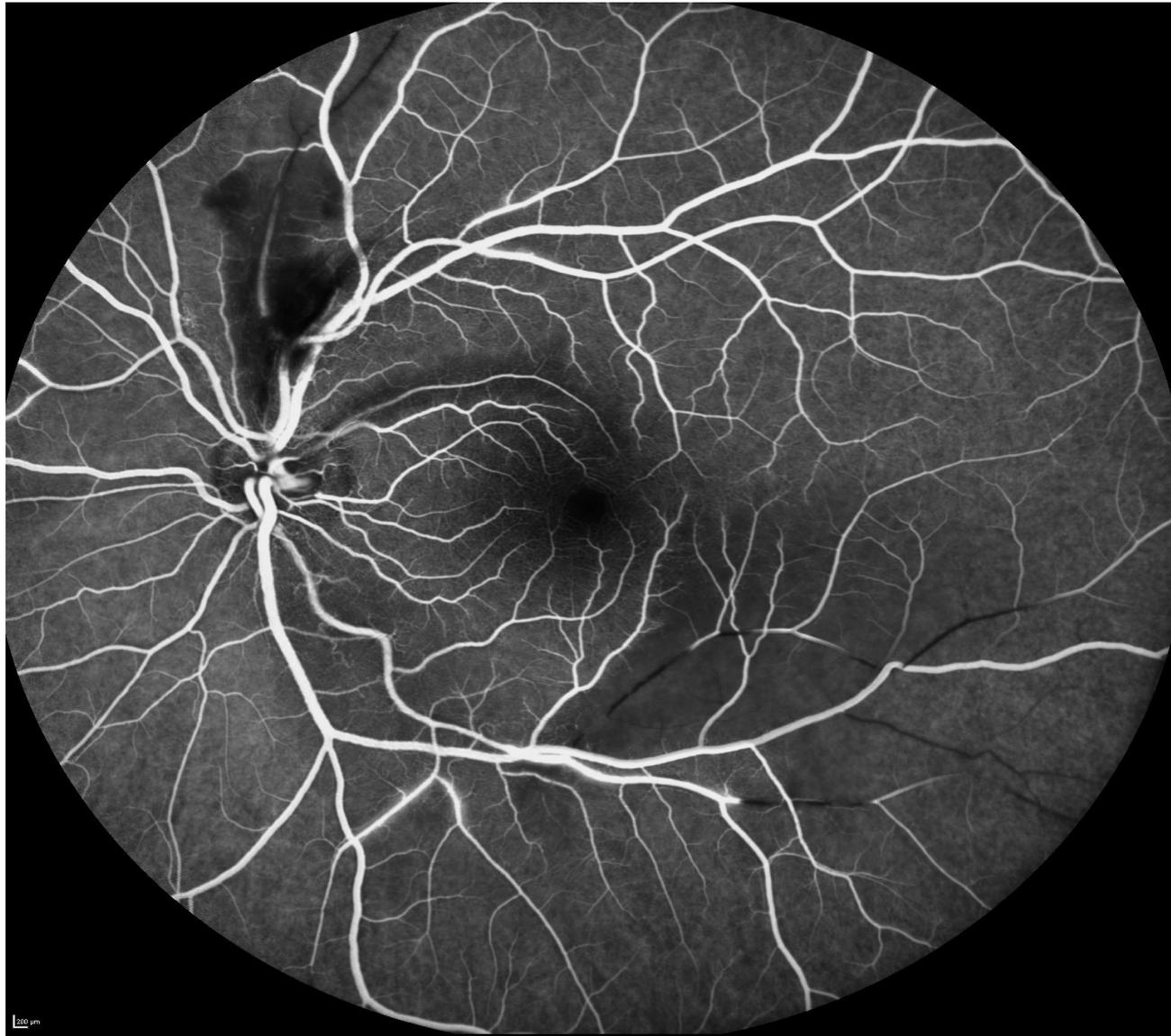
HEIDELBERG
engineering



200 μ m

16/09/2011, OD
FA, 10:51.46 55° ART(26)

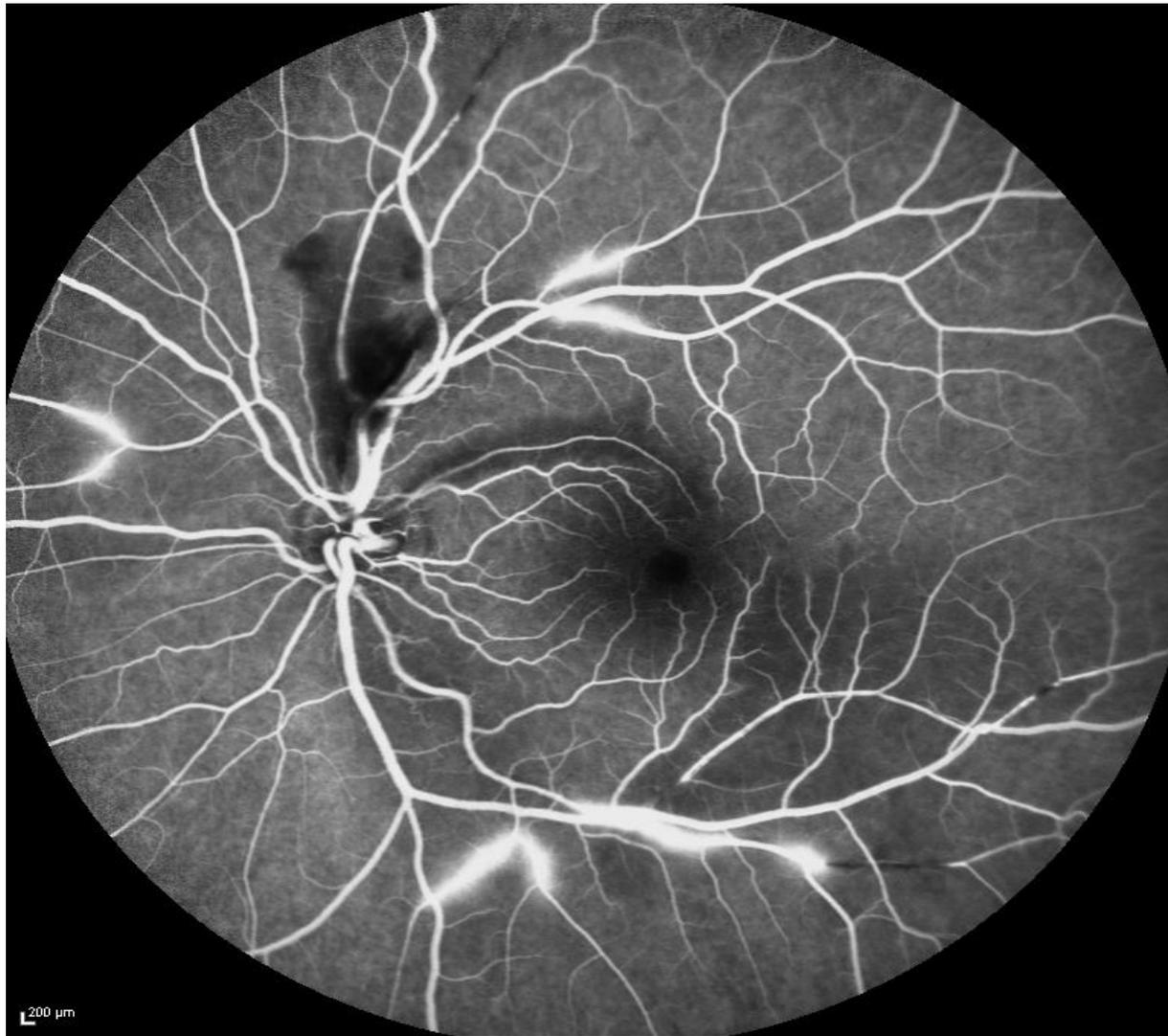
HEIDELBERG
ENGINEERING



100 µm

16/09/2011, OS
FA 0.57.58 55° ART(19) [HR]

HEIDELBERG
engineering



200 μ m

16/09/2011, OS

FA 2:49.36 55° ART(10)

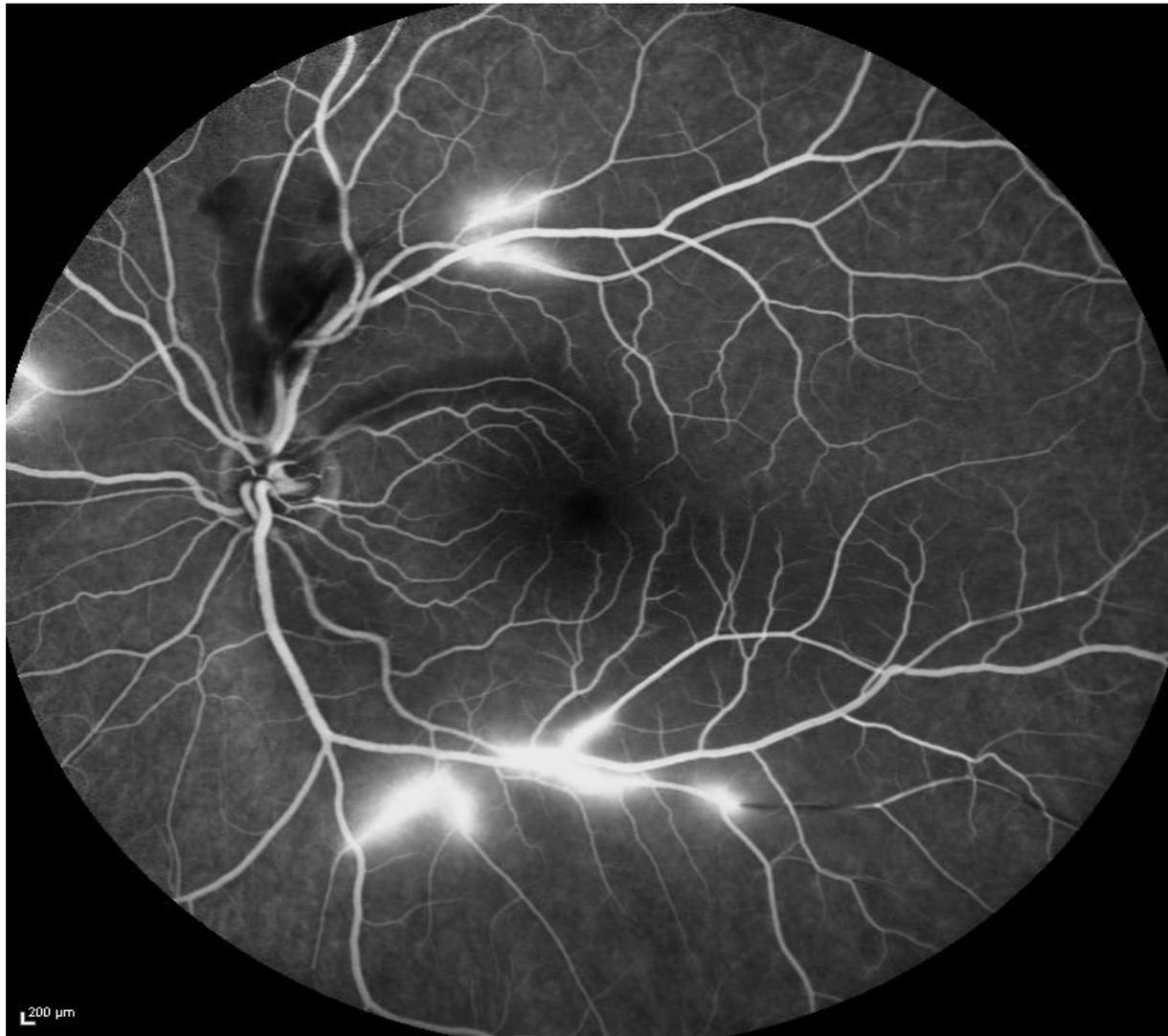
HEIDELBERG
ENGINEERING



100 µm

16/09/2011, OS
FA 3:33.68 55° ART(11) [HR]

HEIDELBERG
engineering



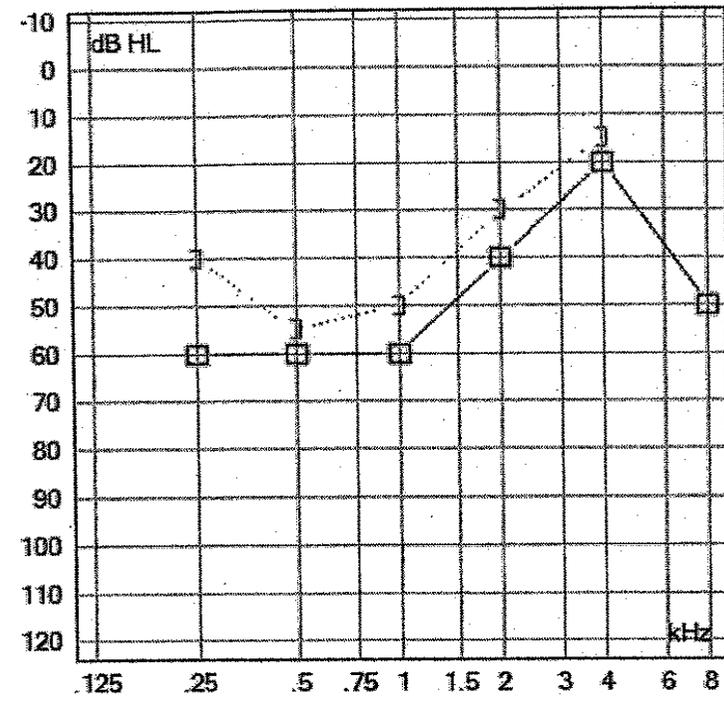
200 μ m

16/09/2011, OS
FA, 10:40.01 55° ART(37)

HEIDELBERG
ENGINEERING

Evolution (1)

- 5 bolus de methylprednisolone et relais CTC 1mg/kg et antiaggrégants plaquettaires
- Apparition le 17/05 de
 - Hypoacousie droite de survenue brutale
 - Céphalées
 - Vomissements
 - Babinski



Audiogramme : surdité de perception

Evolution (2)

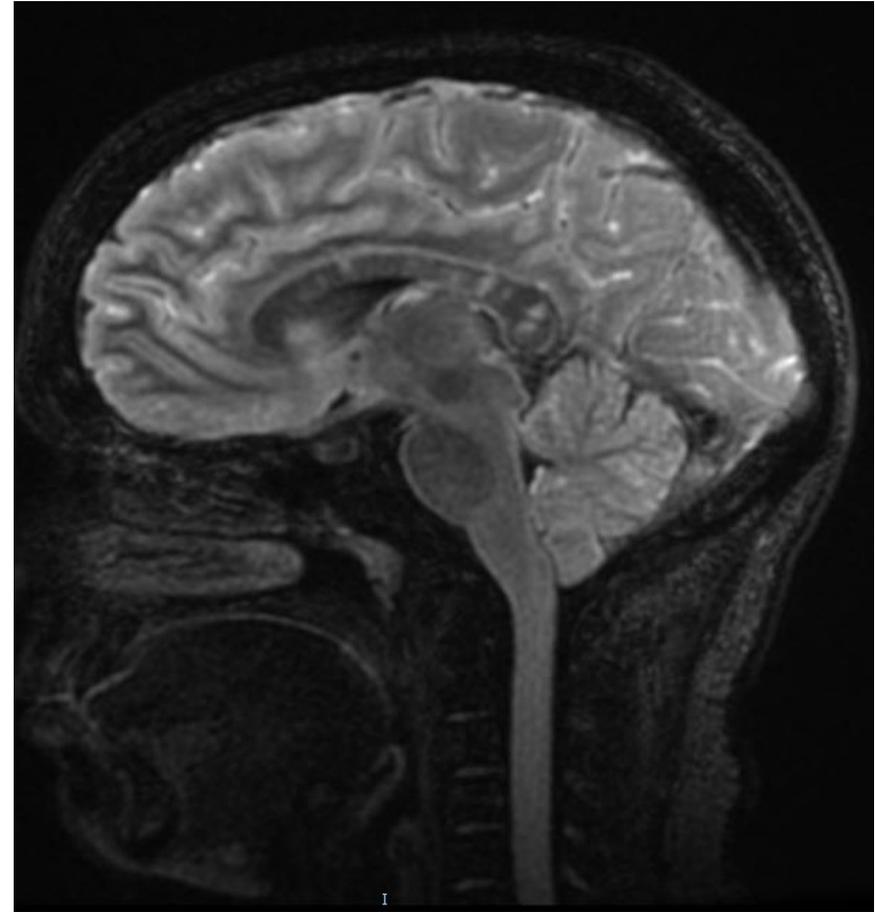
- **Anticoagulation efficace**
- **Stabilisation puis plusieurs rechutes OPH**
 - **6 perfusions d'Endoxan**
 - **Relais Azathioprine puis Methotrexate**
 - **IgIV**

Sd de Susac

- **SICRET : Small Infarctions of Cochlear Retinal and Encephalic Tissues**
- **Femme 80% cas, âge médian 30 ans (9- 69 ans)**
- **Physiopathologie inconnue**
 - **Pas de vascularite à l'histo**
 - **Lésions vasculaires endothéliales**
 - **Origine auto-immune probable**

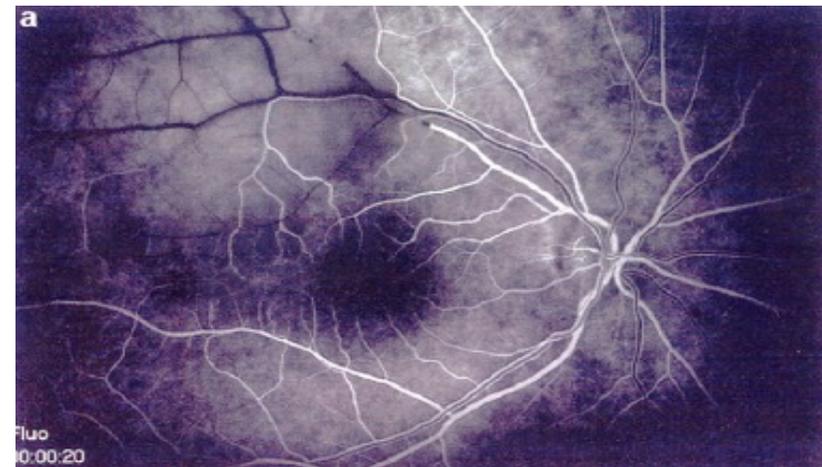
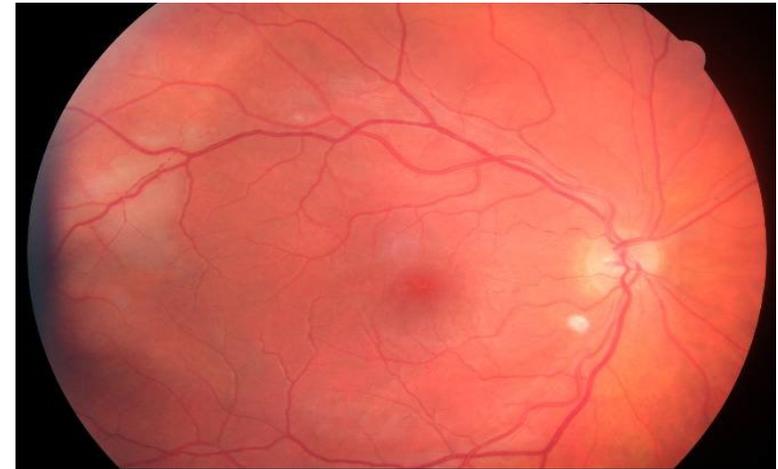
Atteinte neuro centrale

- **Céphalée (migraine +/- aura)**
- **Encéphalopathie, tbles psychiatriques (BDA,...)**
- **Sd cérébelleux, Sd Pyramidal, atteinte PC, comitialité**
- **Méningite lymphocytaire très modérée, protéinorachie élevée**



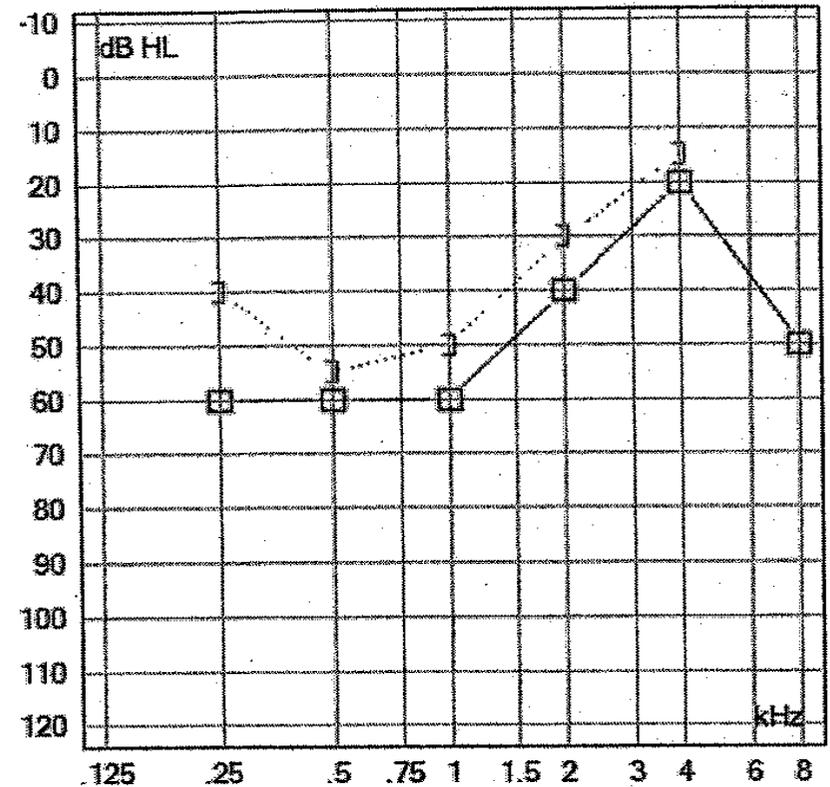
Rétinopathie

- **Occlusions bilatérales et multiples des branches de l'artère centrale de la rétine**
- **Fuites capillaires à l'angio**



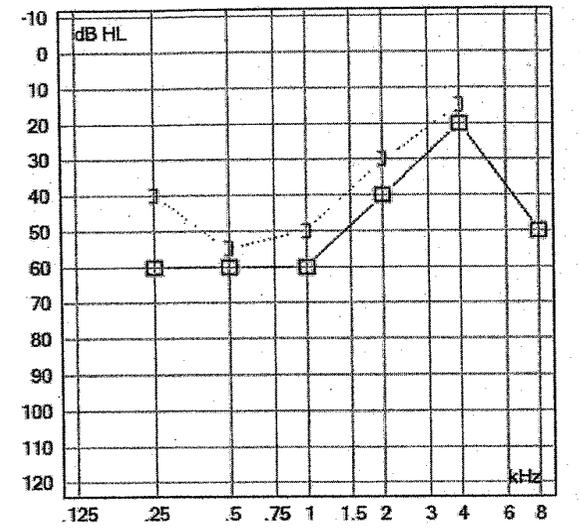
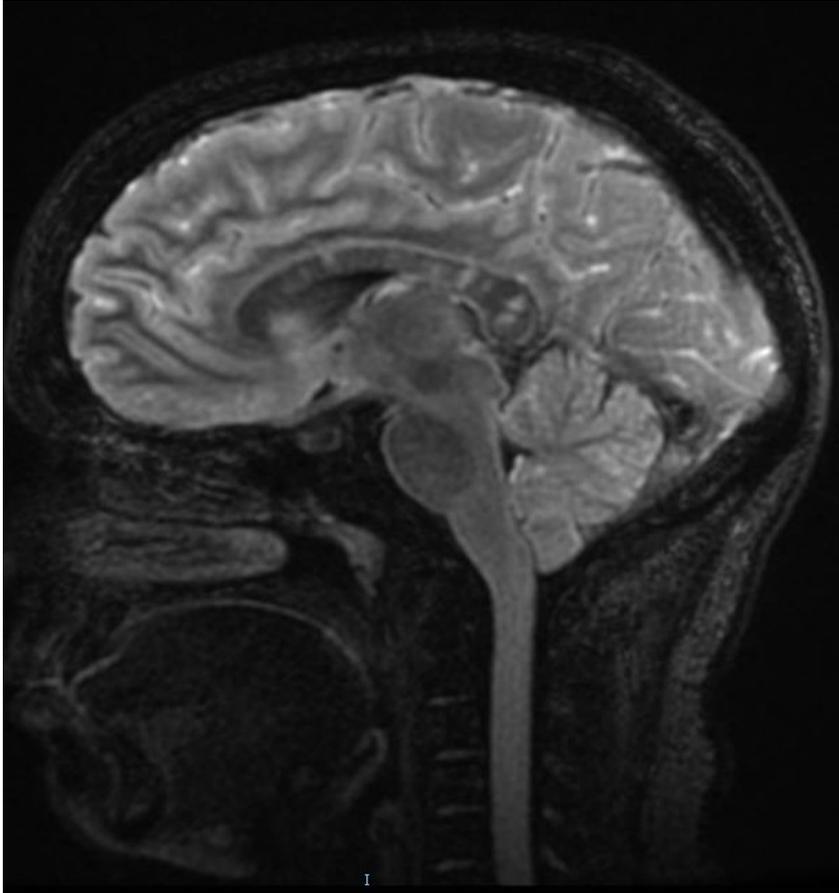
Atteinte cochléo-vestibulaire

- Hypoacousie brutale avec surdit  de perception pr dominant sur les fr quence basses
- Vertige rotatoire
- Ataxie
- Nystagmus

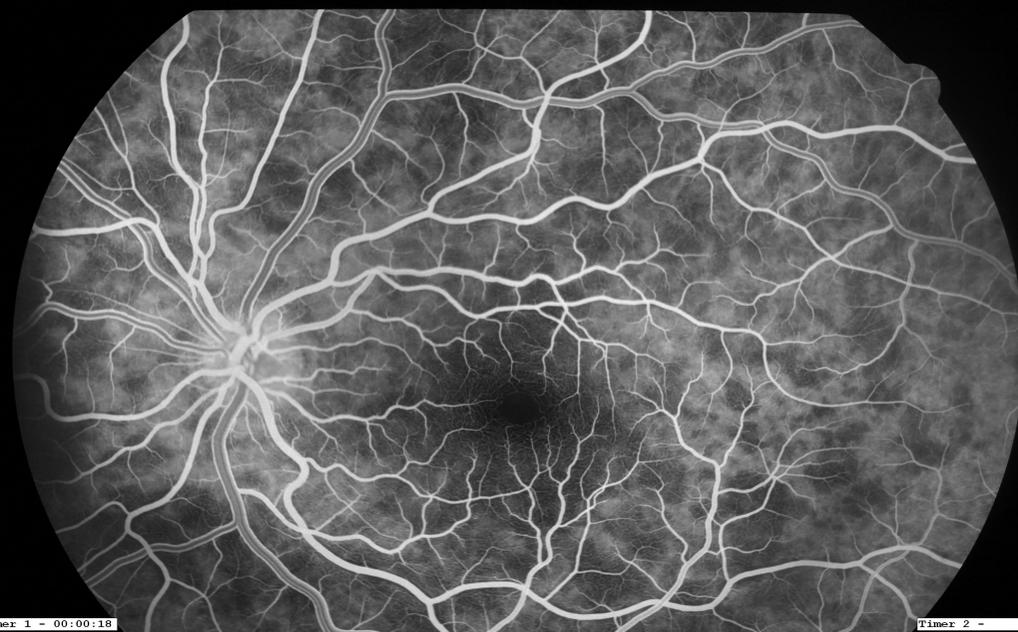
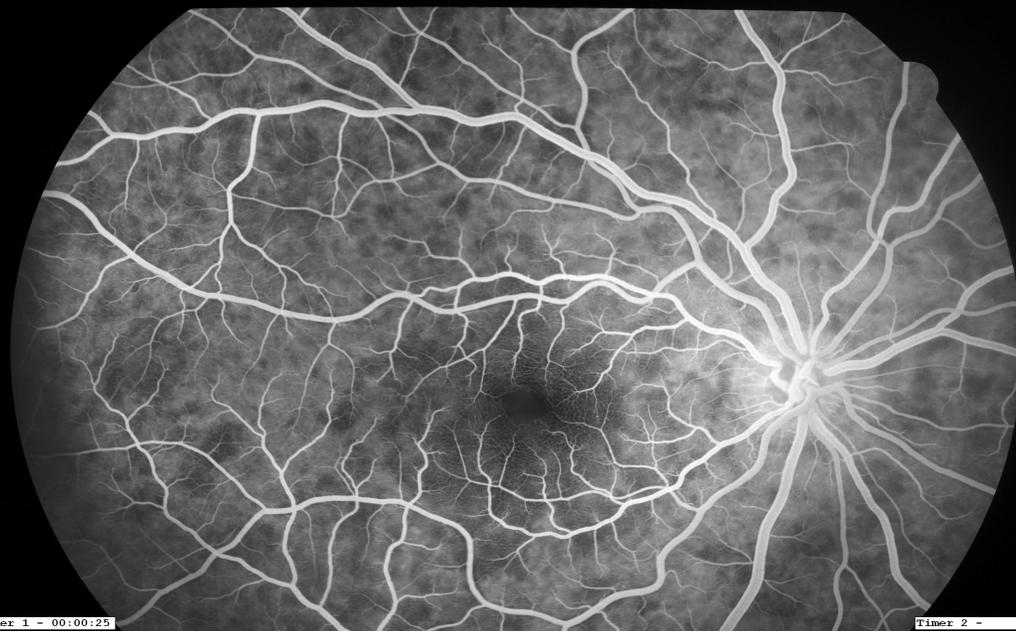
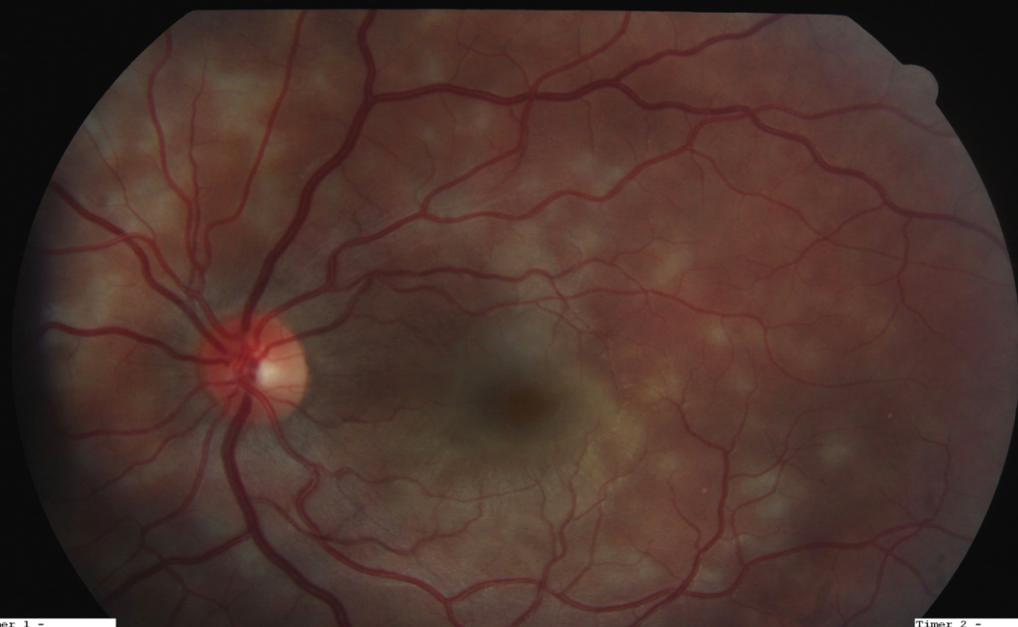


- **Phase « chaude » avec plusieurs poussées pendant 2-3 ans**
- **Puis « phase froide »**
 - **Rémission atteinte cérébrale et ORL (séquelles)**
 - **Fuites capillaires à l'angio sans nouvelles occlusions artériolaires**
- **Traitement**
 - 1) **CTC (bolus au début) +AAP**
 - 2) **Anticoagulation efficace**
 - 3) **ENDOXAN**
 - 4) **IgIV ou RITUXIMAB**

Triade du Sd de Susac



Mlle F., 23 ans, BAV OD le 16/11/13 ; BAV OG le 18/11/13 – Examen le 21/11/13 : VBLM ODG



Antécédents médicaux : RAS

Sept jours auparavant, épisode « pseudo-grippal » (fièvre – céphalées – myalgies), spontanément résolutif

Antécédents ophtalmologiques : RAS

Examen :

OD

Œil blanc

Tyndall cellulaire 1+

Flare 1+

Pas de synéchie

Pas de hyalite

OG

Œil blanc

Tyndall cellulaire 1+

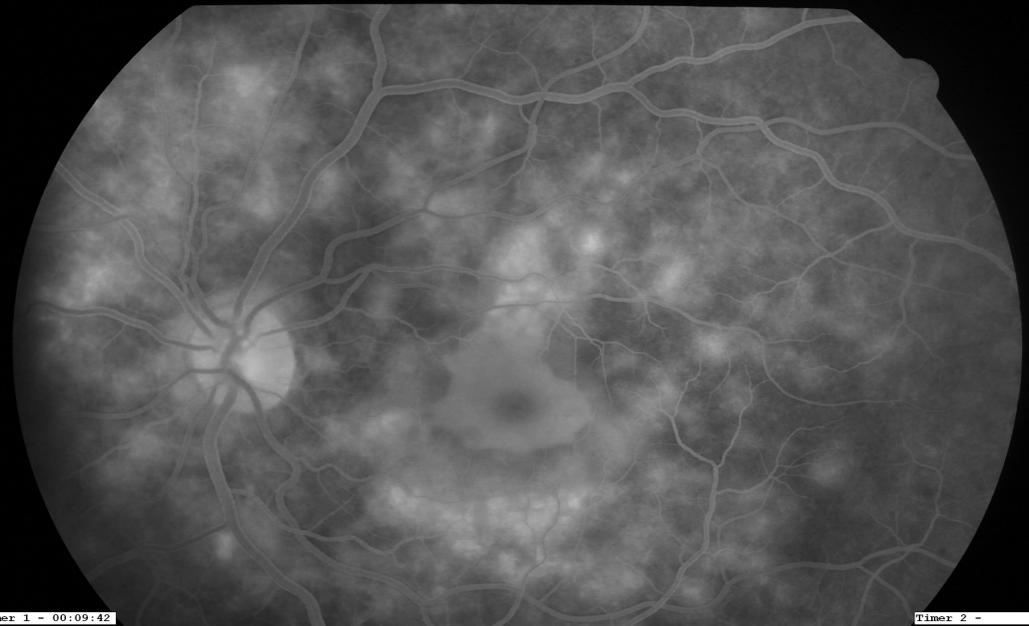
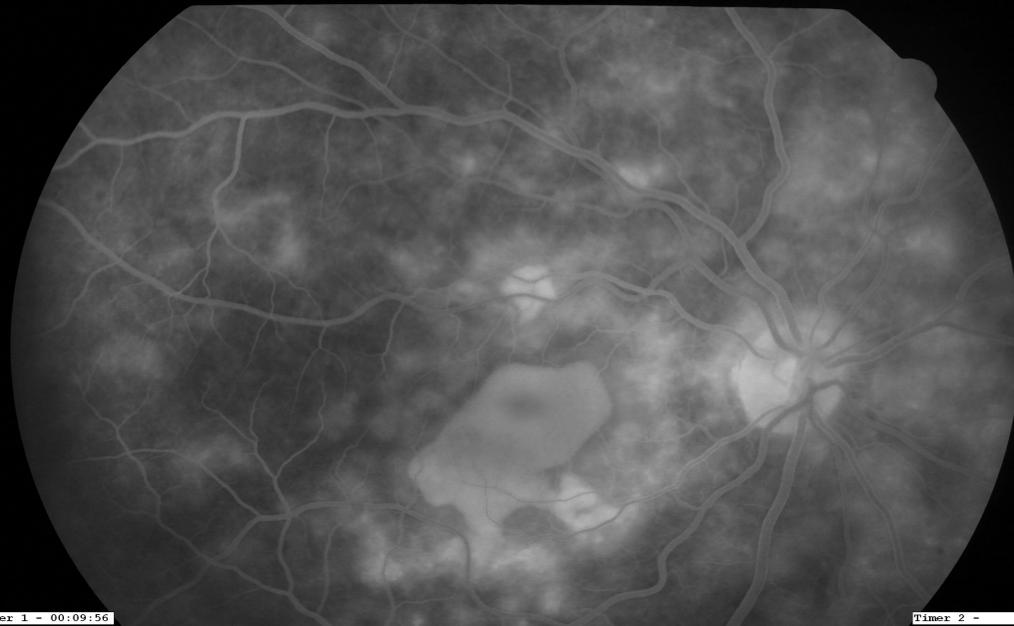
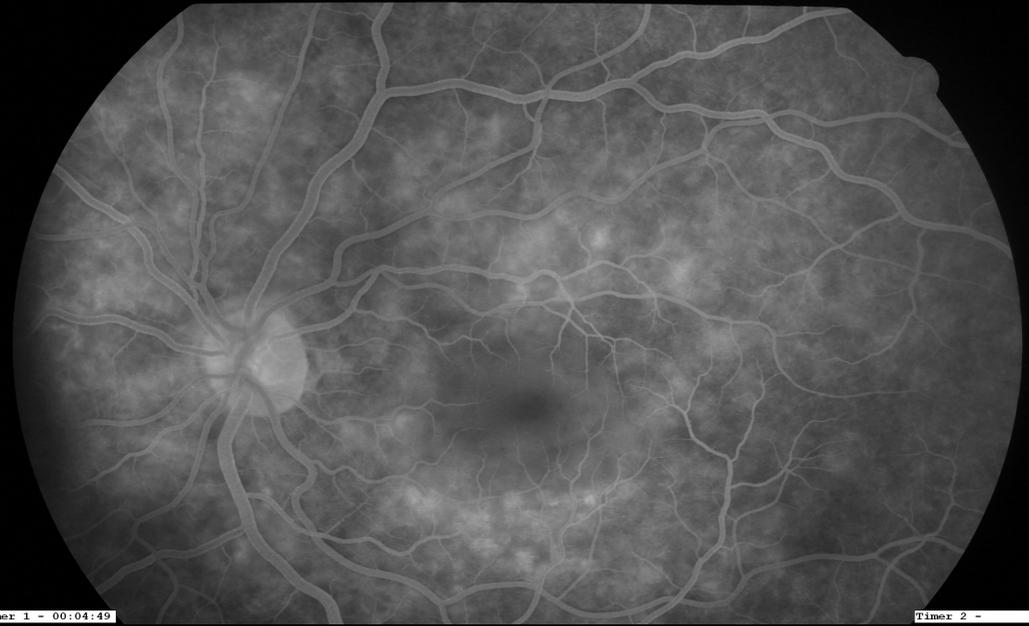
Flare 1+

Pas de synéchie

Pas de hyalite

Cf. imagerie du fond d'œil

Examen initial - angiographie fluorescéinique



Examen initial - autofluorescence



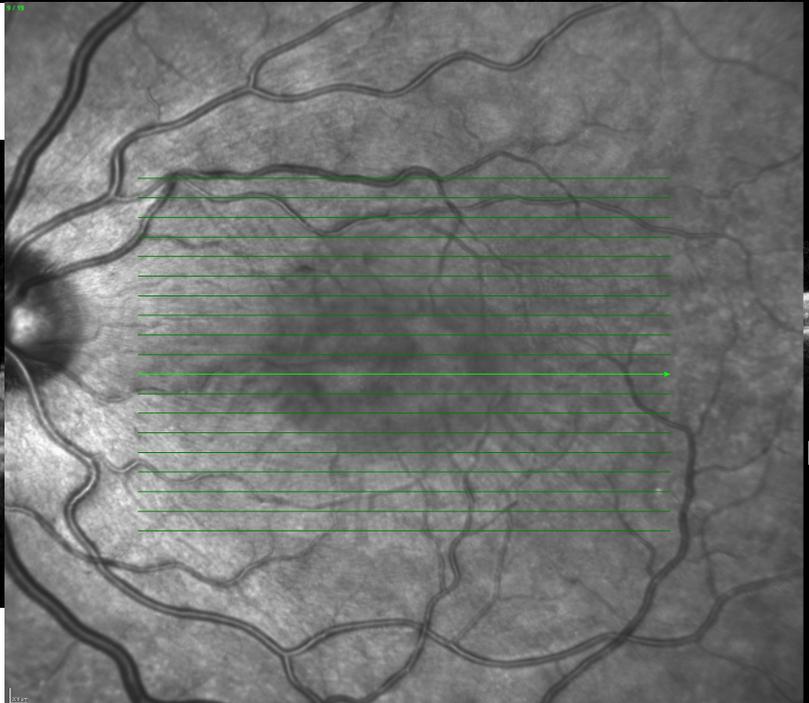
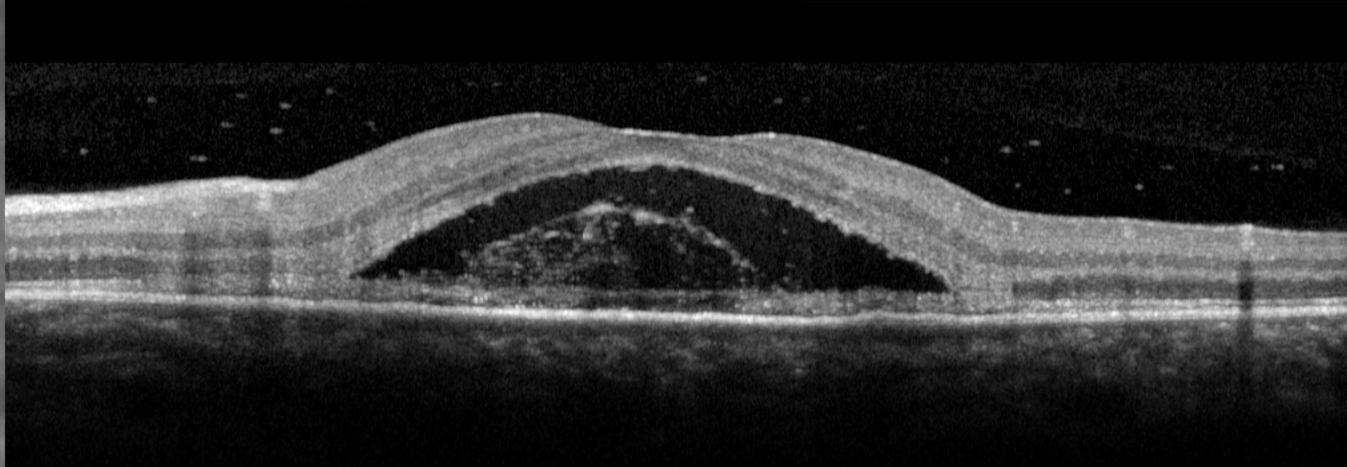
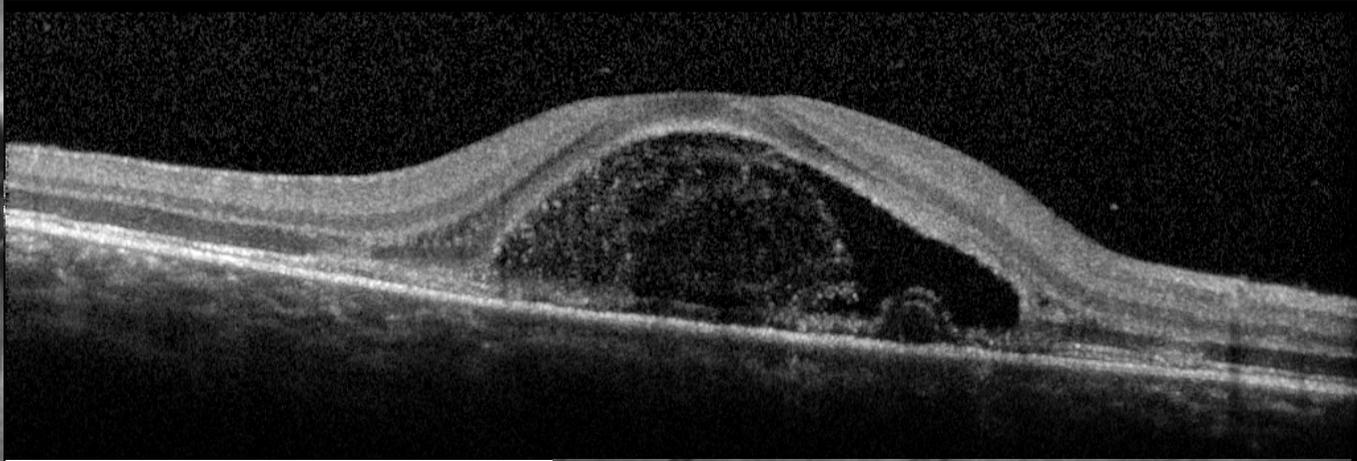
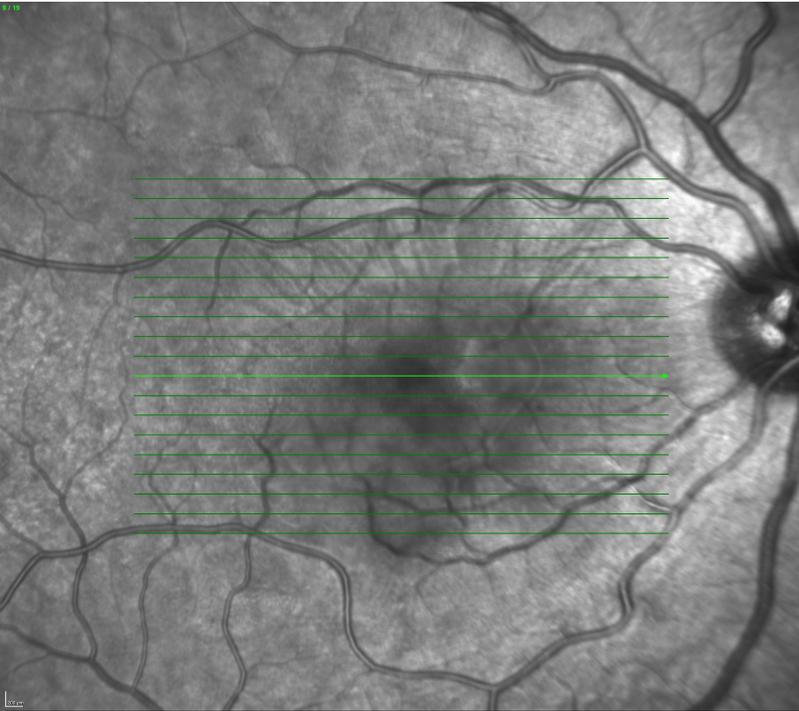
21/11/2013, OD
AF 56° ART(49)



21/11/2013, OS
AF 56° ART(33)



Examen initial - OCT



Hospitalisation en médecine interne

Syndrome inflammatoire biologique : CRP 32 mg/l
Hypergammaglobulinémie polyclonale (16,7 g/l)

LCR : protides 0,53 g/l, glucose 3,7 mM/l,
121 éléments nucléés /mm³ (100% lymphocytes)

RAS par ailleurs

Question N° 1 : Votre première hypothèse diagnostique est :

- A. Syndrome des taches blanches multiples évanescentes (*Multiple Evanescent White Dot Syndrome – MEWDS*)
- B. Choroidite multifocale
- C. Choroidite ponctuée interne
- D. Epithéliopathie en plaques
- E. Chorioretinopathie de type birdshot



Vous retenez le diagnostic d'**épithéliopathie en plaques**

Question N° 2 : Parmi les éléments ci-dessous, lequel pourrait être un élément atypique dans ce contexte diagnostique

- A. Sexe féminin
- B. Méningite lymphocytaire
- C. Hypofluorescence aux temps précoces, hyperfluorescence aux temps tardifs
- D. Décollements séreux rétiniens
- E. Aucune des réponses ci-dessus : toutes les manifestations sont typiques

Question N° 3 : Quelle est votre décision thérapeutique initiale

A. Abstention

B. Prednisone *per os* 1 mg/kg/j

C. Corticothérapie par 3 bolus IV de methylprednisolone (500 mg/j)

D. Corticothérapie par 3 bolus IV et immunosuppresseur (Mycophénolate mofétil 2g/j)

E. Corticothérapie par 3 bolus IV et injections intravitréennes bilatérales d'anti-VEGF

Question N° 4 : Après avoir pris votre décision thérapeutique, dans quel délai attendez-vous une acuité visuelle $\geq 2/10$?

A. Environ 1 semaine

B. Environ 1 mois

C. Environ 3 mois

D. Environ 1 an

E. Jamais

Question N° 5 : La famille de la patiente, dont sa tante médecin généraliste, vous demande un entretien pour faire le point sur le pronostic à long terme. Votre pronostic est :

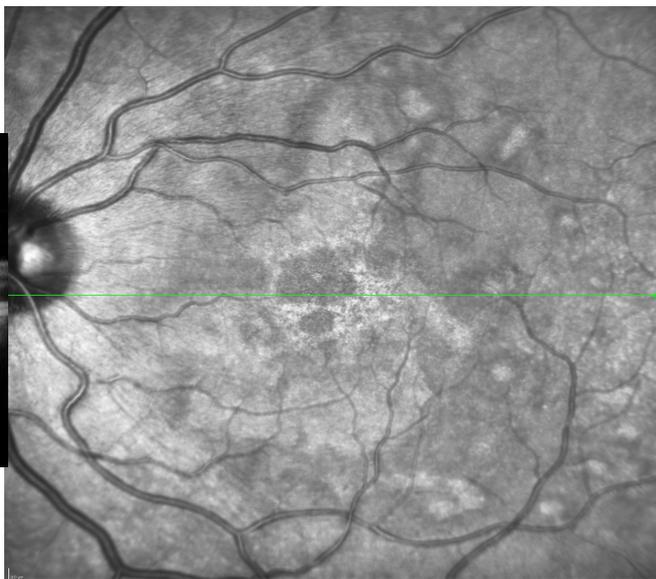
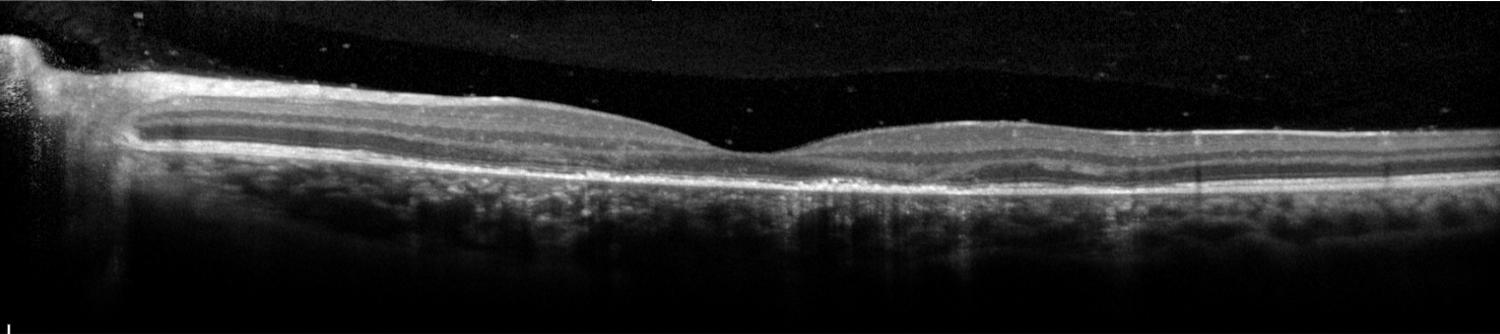
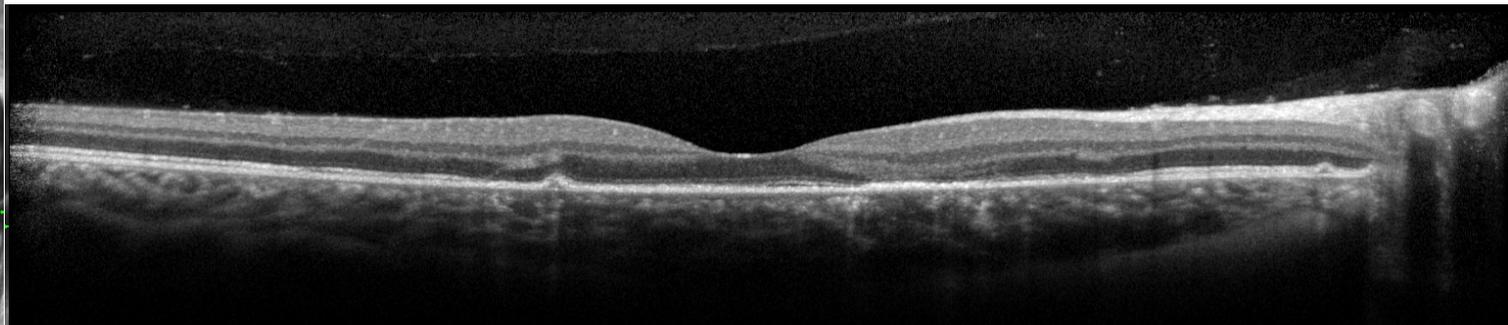
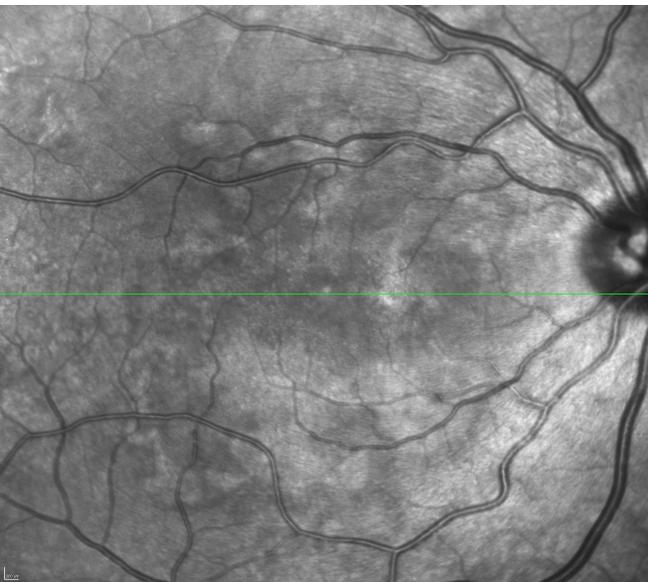
- A. Orientation vers un établissement spécialisé - Apprentissage du Braille recommandé
- B. Amélioration fonctionnelle, mais AV finale incompatible avec la conduite automobile
- C. Pronostic très variable, aucune prédiction possible
- D. Récupération quasi-totale d'une vision normale, mais risque de rechute
- E. Récupération quasi-totale d'une vision normale, sans risque de rechute

Fond d'œil à J7



OCT à J7

AV : 4/10 ODG



Autofluorescence à J7



200 µm

28/11/2013, OD
AF 55° ART(49)

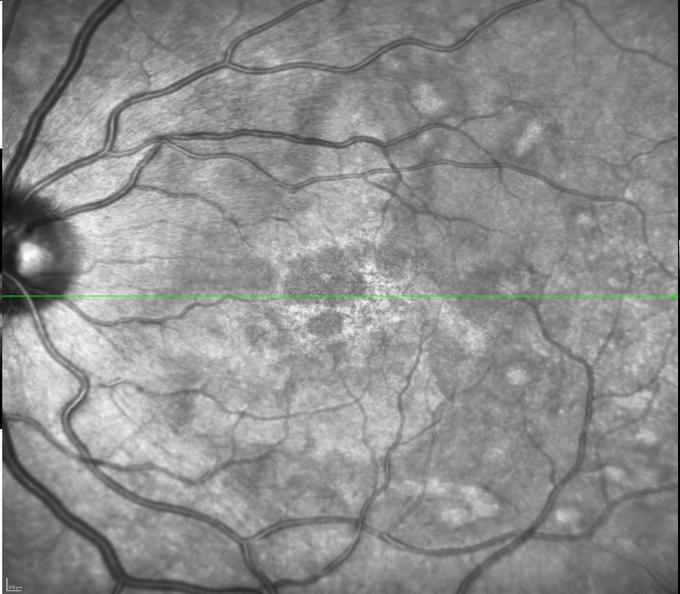
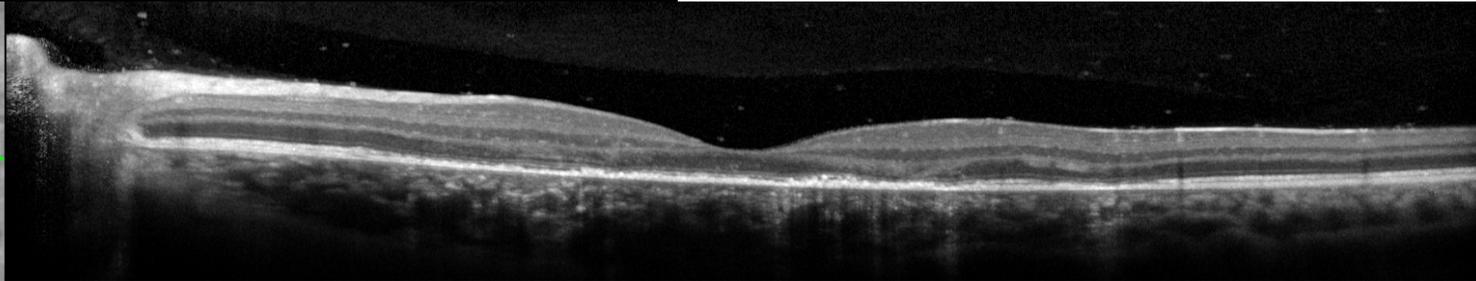
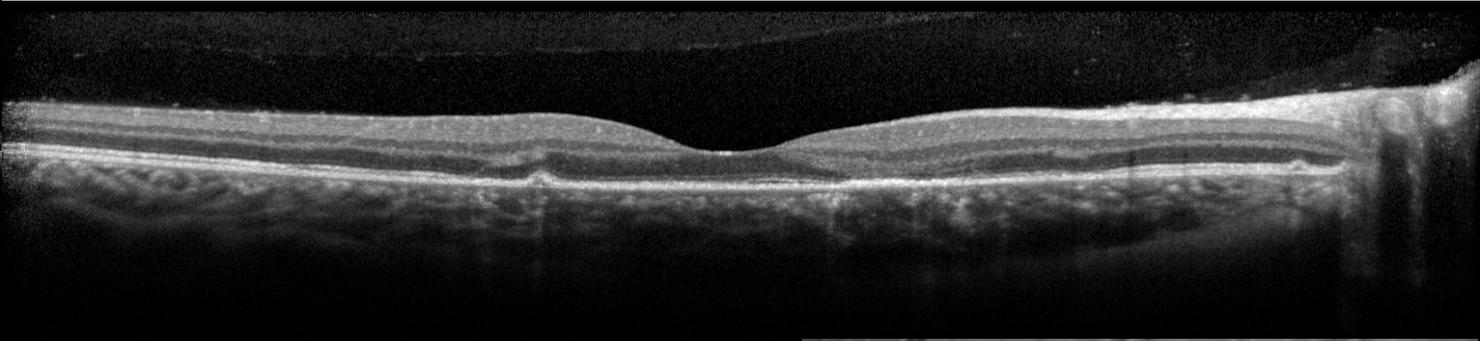
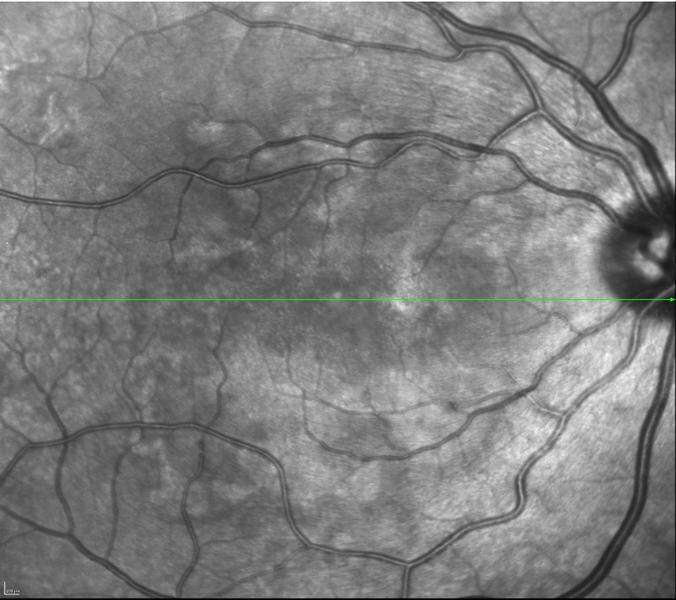
200 µm

28/11/2013, OS
AF 55° ART(49)

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OCT à J7



Champ visuel à 1 mois

Test de seuil central 30-2

Contrôle de fixation: Tache aveugle
 Cible de fixation: Central
 Pertes de fixation: 0/16
 Erreurs faux pos.: 0/9
 Erreurs faux nég.: 0/8
 Durée du test: 08:12

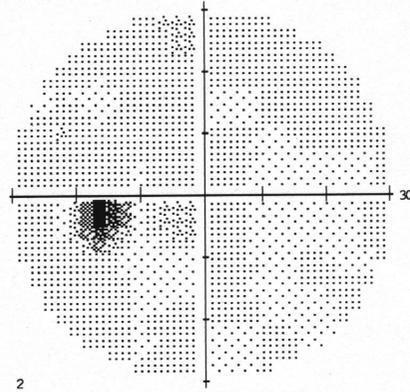
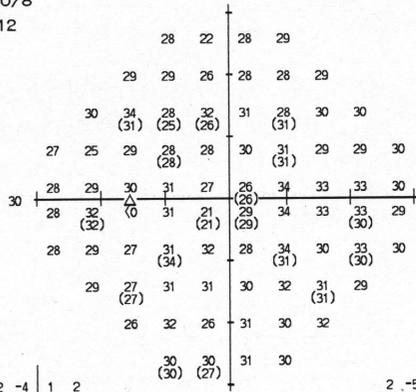
Stimulus: III, Blanc
 Fond: 31.5 ASB
 Stratégie: FASTPAC

Diamètre de la pupille:
 Acuité visuelle:
 RX: DS DC X

Date: 13-12-2013
 Heure: 10:21
 L'âge: 23

Fovéa: 31 dB

(Fovéa 3x)



2	-4	1	2
0	0	-3	-1
0	2	-4	-2
-4	-6	-3	-4
-4	-3	-2	-7
-4	0	-2	-13
-4	-3	-5	0
-3	-5	-2	-1
-5	0	-6	0
0	-2	1	1

Déviati
 otale

2	-5	1	2
0	0	-3	-2
0	2	-5	-2
-4	-6	-3	-4
-4	-3	-2	-7
-4	0	-2	-13
-4	-3	-5	-1
-3	-5	-2	-2
-6	0	-6	-1
0	-2	1	1

Déviati
 ndividuelle

MD -2.01 dB
 PSD 3.09 dB
 SF 1.29 dB
 CPSD 2.73 dB P < 5%

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:: < 5%
 ☼ < 2%
 ☼ < 1%
 ■ < 0.5%

Test de seuil central 30-2

Contrôle de fixation: Tache aveugle
 Cible de fixation: Central
 Pertes de fixation: 0/15
 Erreurs faux pos.: 0/9
 Erreurs faux nég.: 0/8
 Durée du test: 07:55

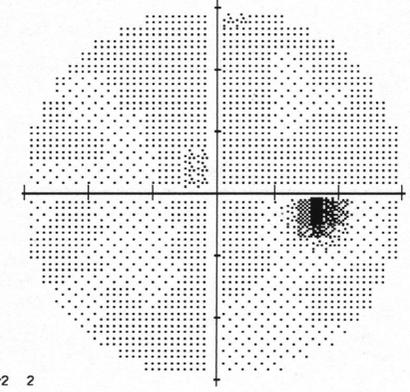
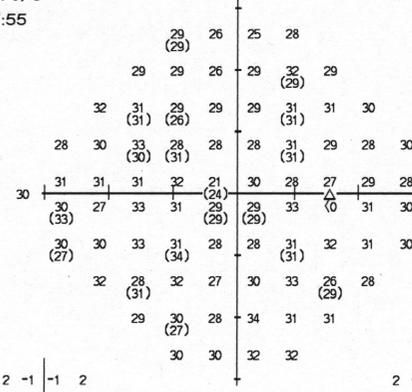
Stimulus: III, Blanc
 Fond: 31.5 ASB
 Stratégie: FASTPAC

Diamètre de la pupille:
 Acuité visuelle:
 RX: DS DC X

Date: 13-12-2013
 Heure: 10:09
 L'âge: 23

Fovéa: 36 dB

(Fovéa 3x)



2	-1	-1	2
0	0	-3	0
3	0	-4	-2
-1	-1	0	-3
1	0	-2	-11
2	-5	0	-3
-1	-1	0	-1
1	-2	0	-5
-1	-2	-3	2
1	0	2	2

Déviati
 otale

2	-1	-2	2
0	-1	-4	-1
2	0	-4	-3
-1	-1	-1	-4
1	0	-2	-12
1	-5	0	-3
-1	-2	0	-1
1	-2	-1	-6
-2	-3	-4	2
0	0	1	2

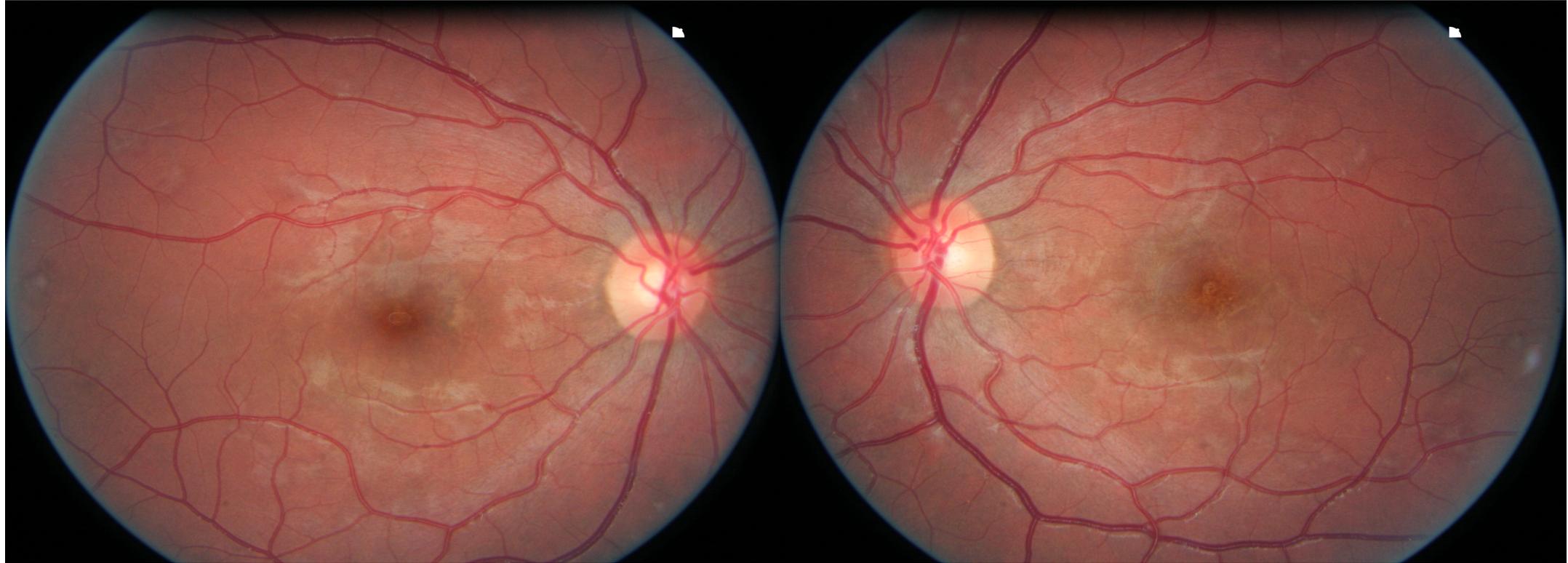
Déviati
 ndividuelle

MD -1.98 dB
 PSD 2.75 dB
 SF 1.48 dB
 CPSD 2.18 dB P < 10%

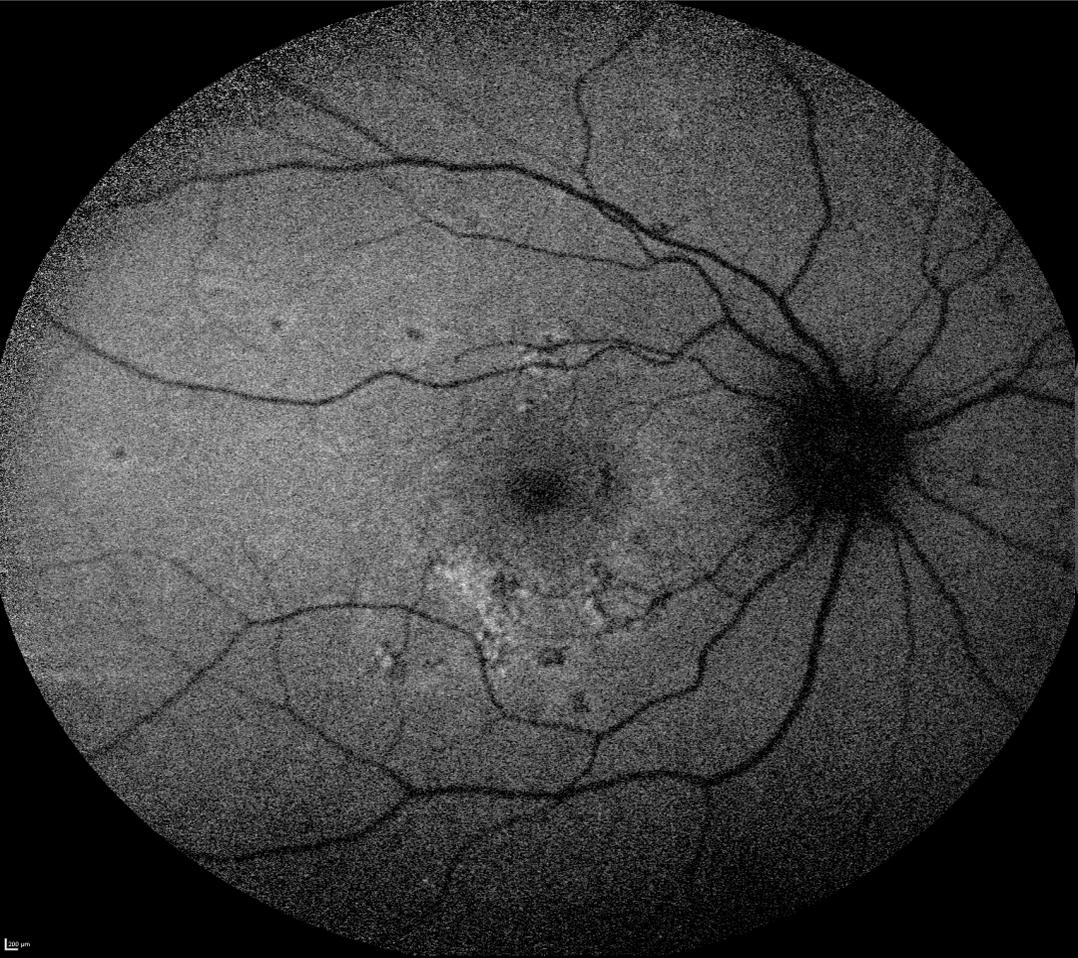
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:: < 5%
 ☼ < 2%
 ☼ < 1%
 ■ < 0.5%

Fond d'œil à M4



Autofluorescence à M4



10/03/2014, OD
AF 55° ART(30)



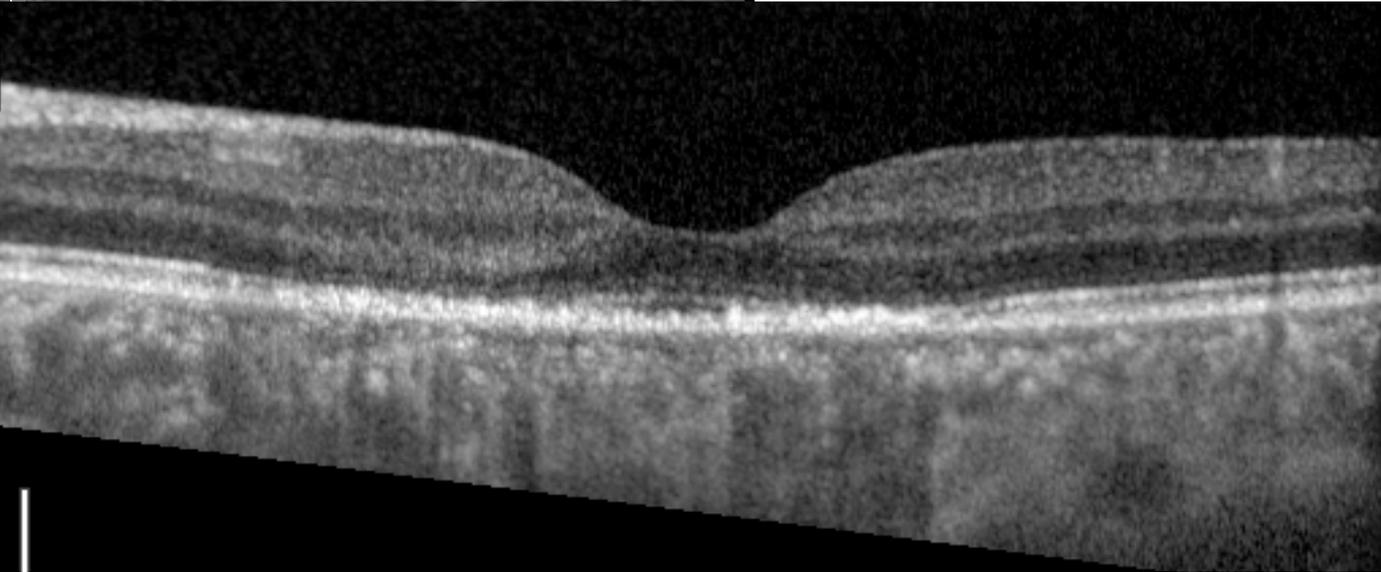
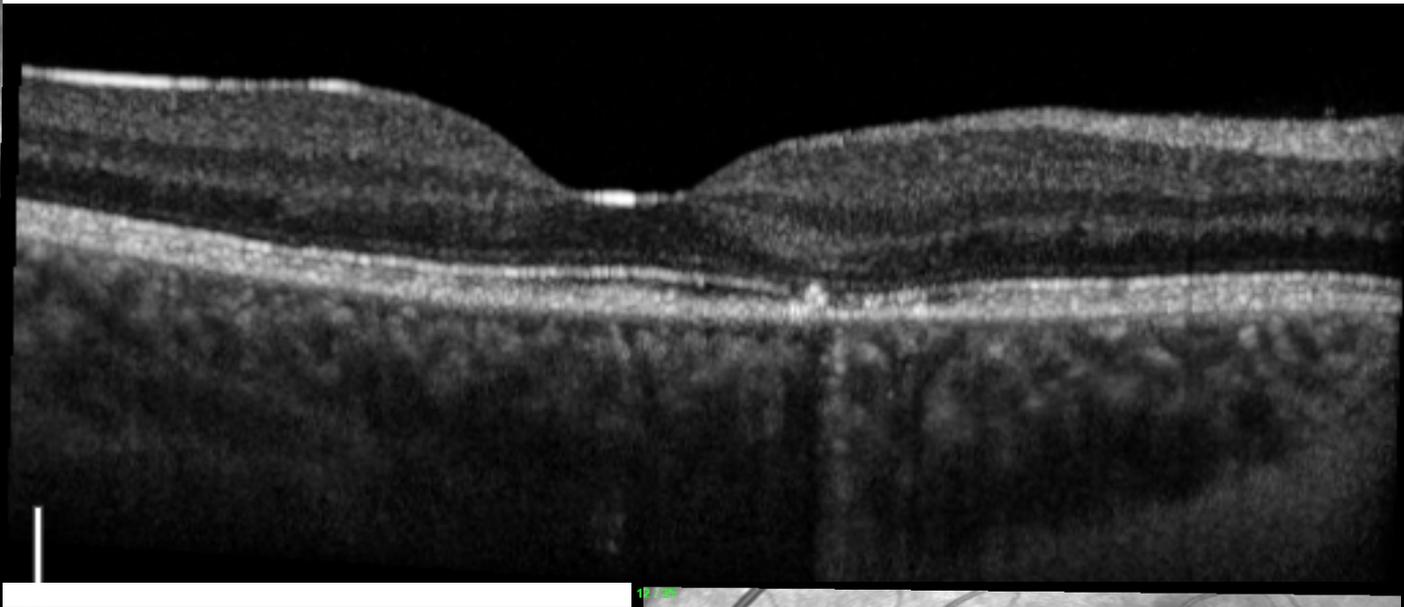
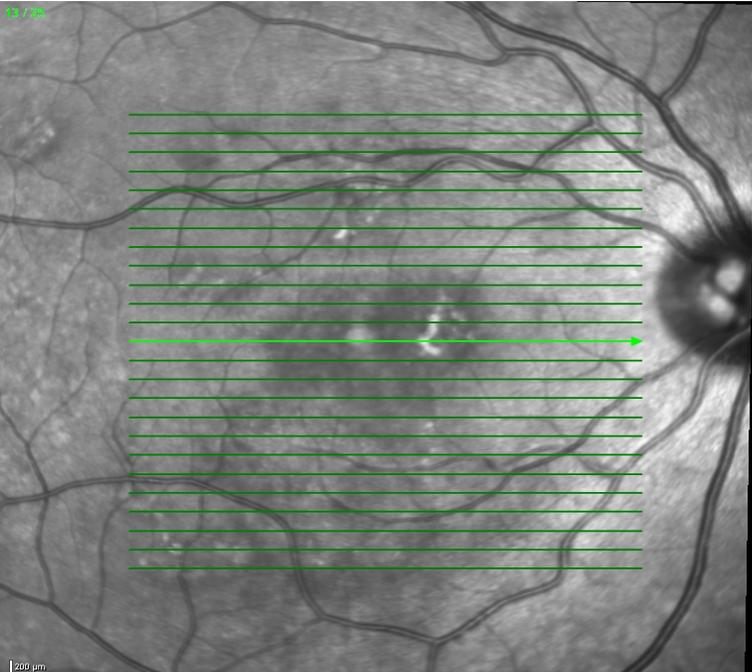
10/03/2014, OS
AF 55° ART(30)

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OCT à M4

AV OD : 10/10 – AV OG 9/10f



Champ visuel à M4

Test de seuil central 30-2

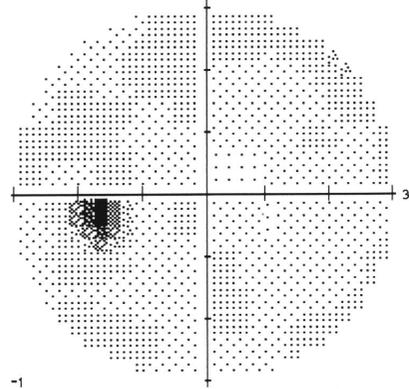
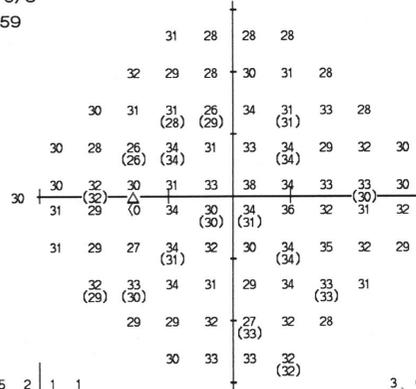
Contrôle de fixation: Tache aveugle
 Cible de fixation: Central
 Pertes de fixation: 0/16
 Erreurs faux pos.: 0/8
 Erreurs faux nég.: 0/8
 Durée du test: 07:59

Stimulus: III, Blanc
 Fond: 31.5 ASB
 Stratégie: FASTPAC

Diamètre de la pupille:
 Acuité visuelle:
 RX: DS DC X

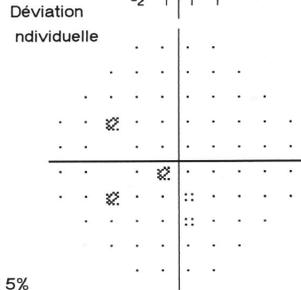
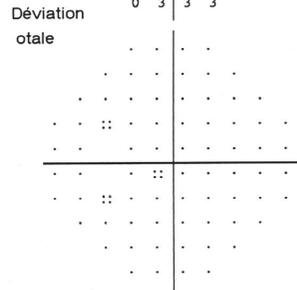
Date: 04-03-2014
 Heure: 11:05
 L'âge: 23

Fovéa: 31 dB ■



5	2	1	1
3	0	-1	1
0	0	-1	-3
0	-3	-6	2
-1	0	-2	-1
-1	-3	1	-4
-1	-3	-5	0
-1	-1	2	-1
-2	-3	0	-1
0	3	3	3

3	0	-1	-1
1	-2	-3	-1
-2	-2	-3	-6
-2	-5	-8	0
-4	-2	-4	-3
-3	-5	-1	-6
-3	-5	-7	-2
-3	-3	-1	-3
-4	-5	-2	-3
-2	1	1	1



● < 5%
 ☒ < 2%
 ☒ < 1%
 ■ < 0.5%

MD -0.13 dB
 PSD 2.24 dB
 SF 1.35 dB
 CPSD 1.63 dB

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Test de seuil central 30-2

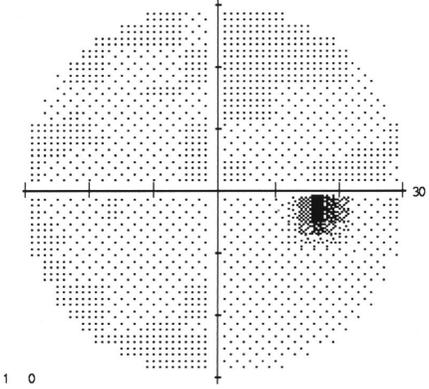
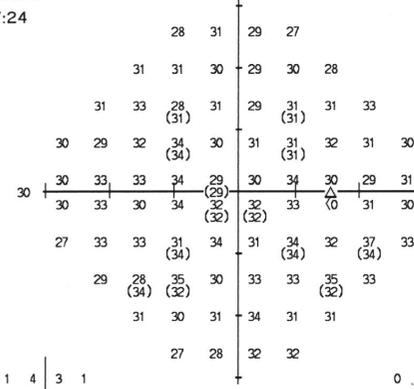
Contrôle de fixation: Tache aveugle
 Cible de fixation: Central
 Pertes de fixation: 0/15
 Erreurs faux pos.: 0/8
 Erreurs faux nég.: 0/8
 Durée du test: 07:24

Stimulus: III, Blanc
 Fond: 31.5 ASB
 Stratégie: FASTPAC

Diamètre de la pupille:
 Acuité visuelle:
 RX: DS DC X

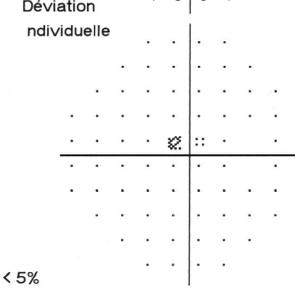
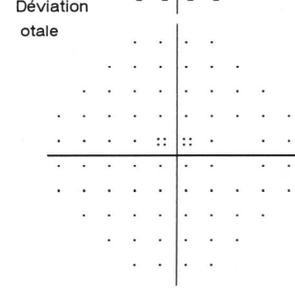
Date: 04-03-2014
 Heure: 10:55
 L'âge: 23

Fovéa: 34 dB



1	4	3	1
2	2	1	0
2	2	-2	0
1	-2	0	1
0	2	0	1
0	1	-3	0
-2	2	0	-1
-2	2	0	-1
-1	-1	1	-2
1	-1	0	2
-2	-2	2	2

0	3	1	0
1	0	-1	-2
0	1	-3	-2
0	-3	-1	0
-1	1	-1	-6
-1	0	-4	-1
-4	0	-1	-2
-3	-2	0	-4
-1	-2	-2	1
-4	-3	0	1



● < 5%
 ☒ < 2%
 ☒ < 1%
 ■ < 0.5%

MD -0.21 dB
 PSD 1.92 dB
 SF 1.76 dB
 CPSD 0.00 dB

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RESEARCH ARTICLE

Open Access



Untreated Acute Posterior Multifocal Placoid Pigment Epitheliopathy (APMPPE): a case series

Olivia Xerri, Sawsen Salah , Dominique Monnet and Antoine P. Brézin

Abstract

Background: Acute Posterior Multifocal Placoid Pigment Epitheliopathy (APMPPE) is a rare inflammatory eye disease that affects the Retinal Pigment Epithelium and outer retina. The purpose of this study was to describe its presentations, as well as its prognosis in a series of untreated patients.

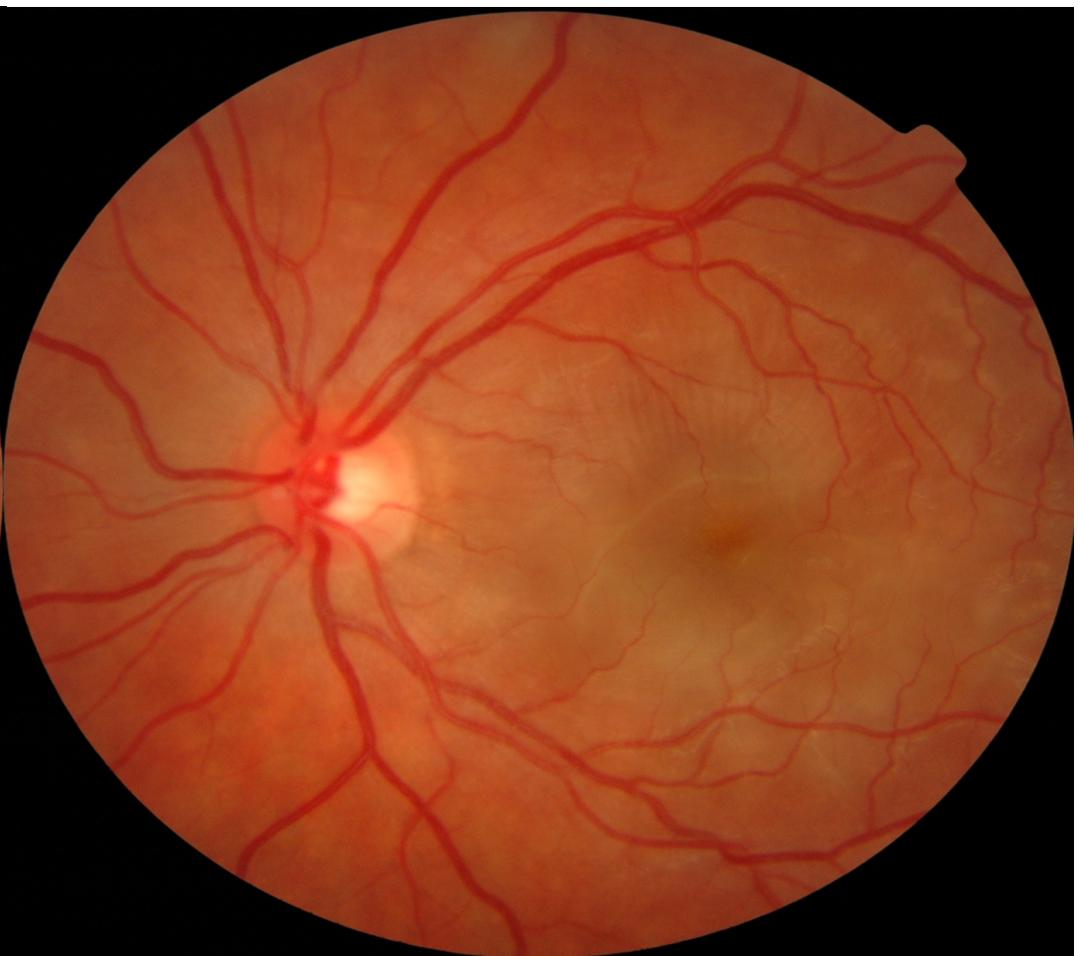
Methods: Records of patients seen in the department of Ophthalmology at Cochin University Hospital, Paris, between April 2002 and June 2015 were retrospectively studied. Patients were included if they presented with the typical findings of APMPPE characterized by whitish or yellowish bilateral placoid lesions, a typical pattern of early hypofluorescence and late hyperfluorescence on fluorescein angiography. Only untreated patients who had been followed for at least 1 month were included.

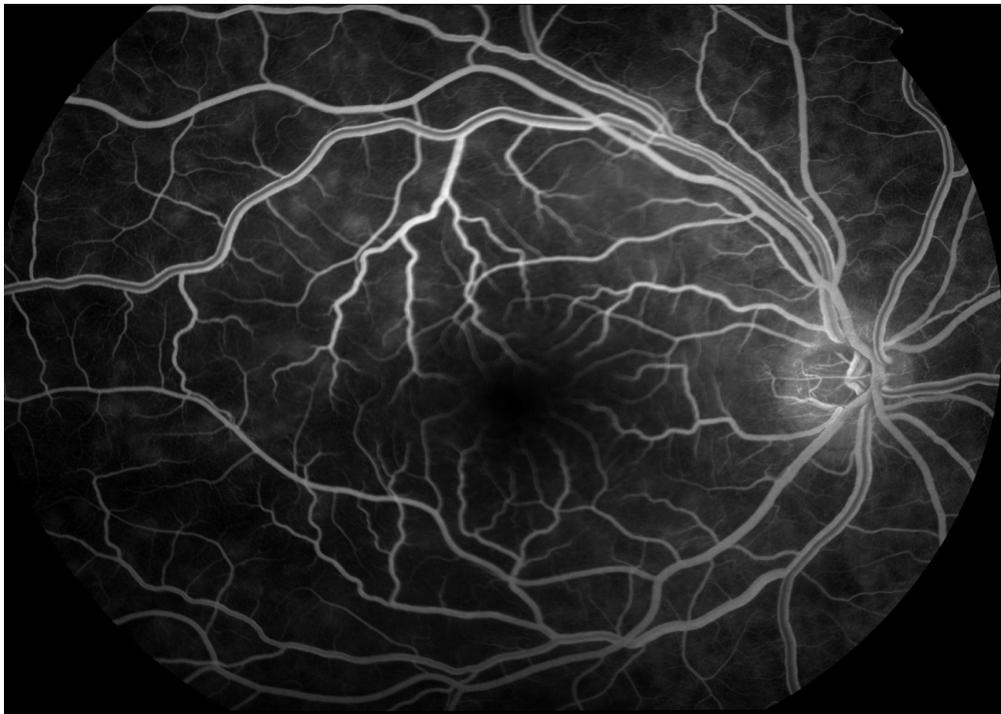
Results: Out of 22 patients' records with a diagnosis of APMPPE, 10 patients (9 women, 1 man), with a mean age of 24.5 ± 4.2 years, fulfilled the study criteria with a diagnosis of typical untreated APMPPE. Prodromal symptoms were reported in 7/10 patients. Macular lesions were observed in 18/20 eyes. Sub-retinal fluid was seen at presentation in 3 eyes. Initial mean BCVA was 0.56 ± 0.81 LogMAR [-0.10 to 2.30]. In 9 out of 10 cases, the time interval between manifestations in the first affected eye and the fellow eye was less than 3 days. After 1 month, BCVA had improved to 0.05 ± 0.089 LogMAR [$0-0.3$], with a decimal BCVA ≥ 0.8 in 17/20 eyes.

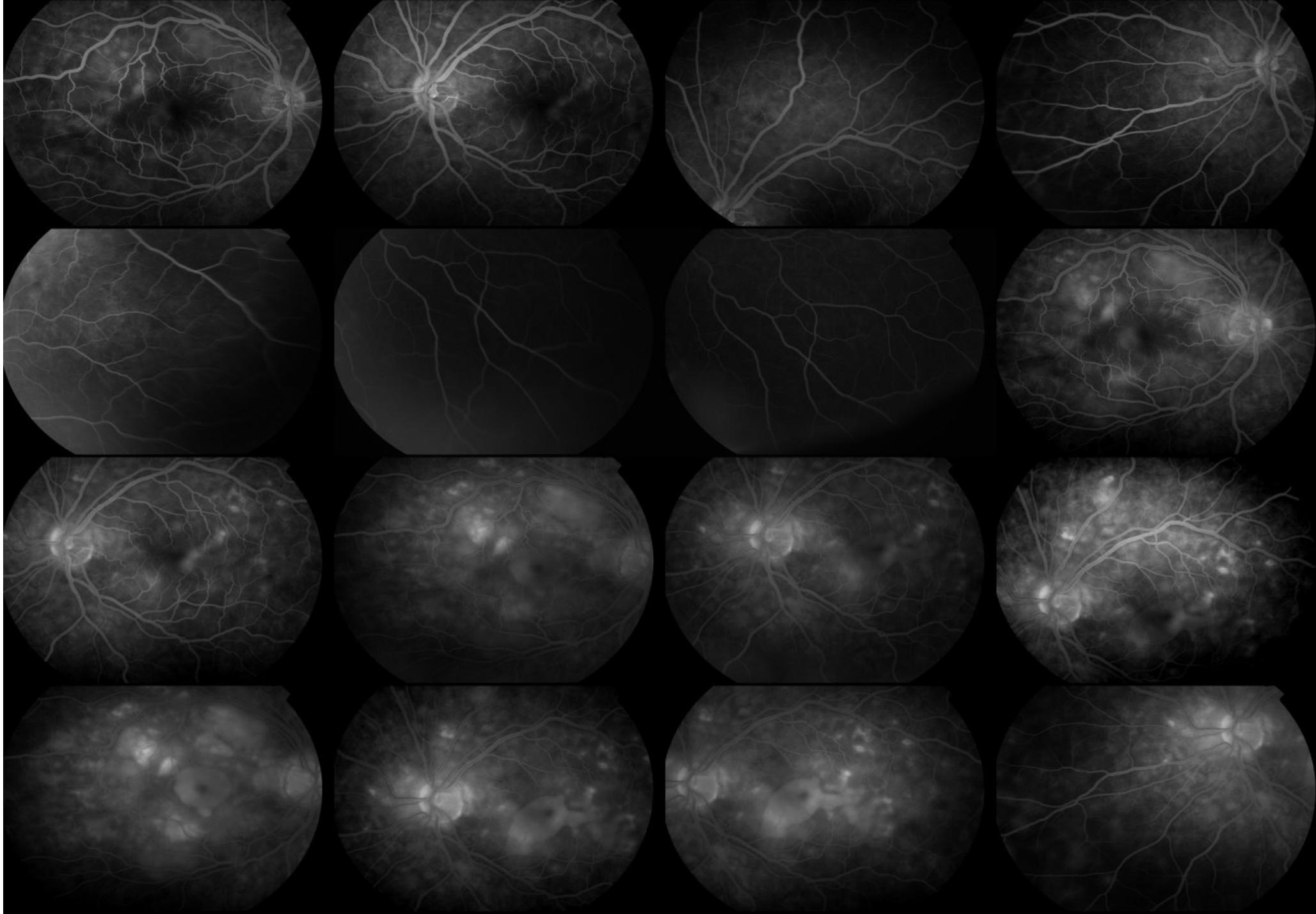
Conclusions: In these 10 cases of untreated APMPPE, a favorable outcome was observed.

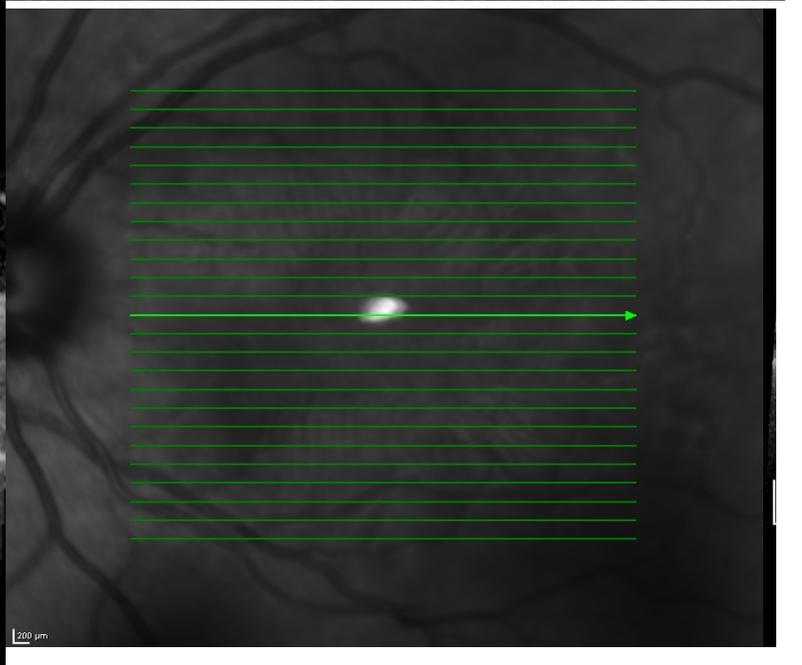
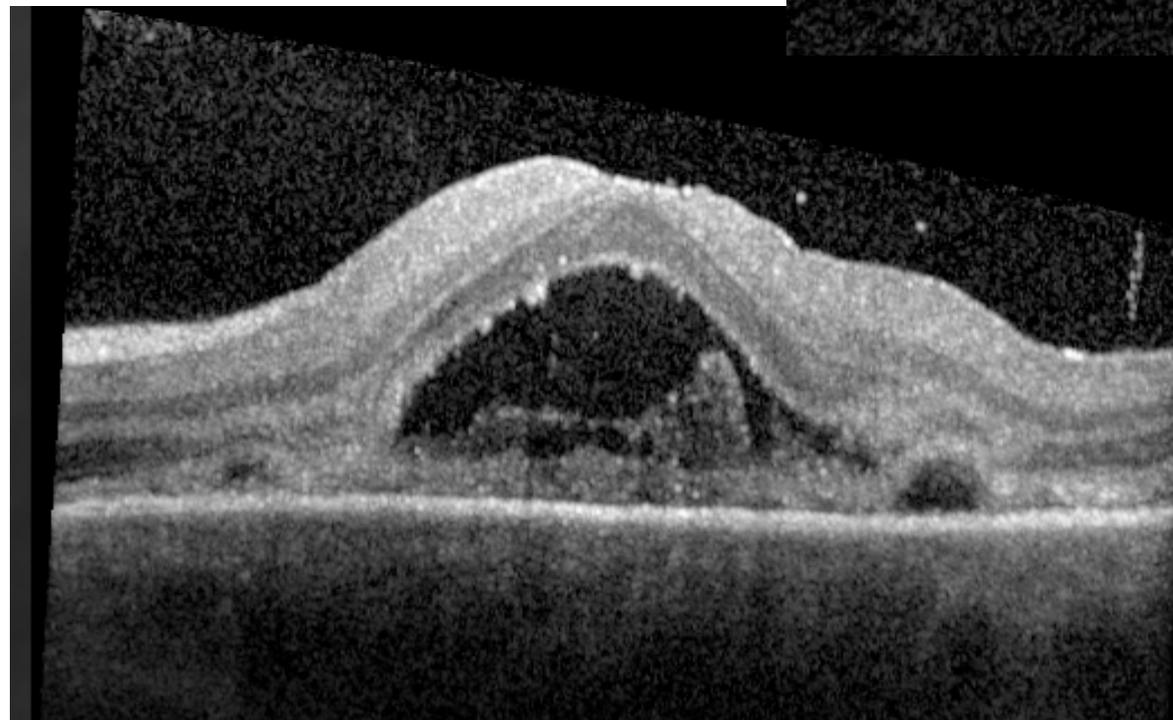
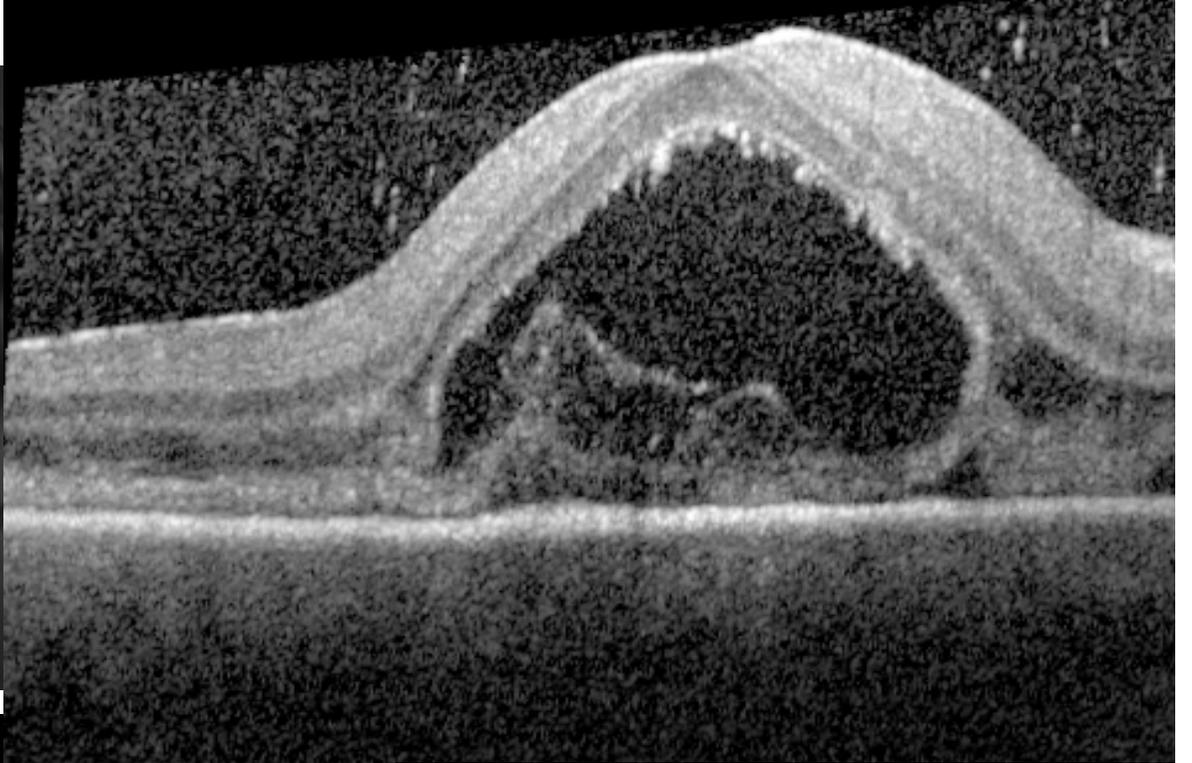
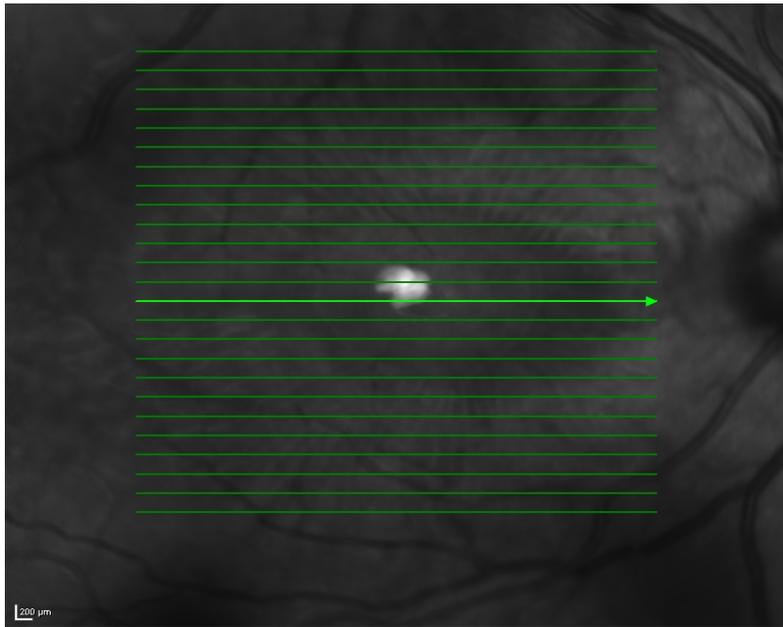
Keywords: Acute posterior multifocal placoid pigment epitheliopathy, Inflammatory disease, Posterior uveitis, Retina, Retinal pigment epithelium

Quelques autres cas



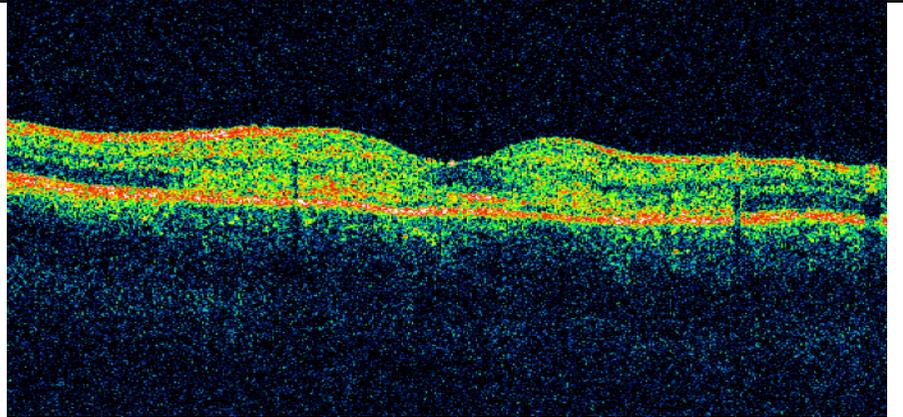
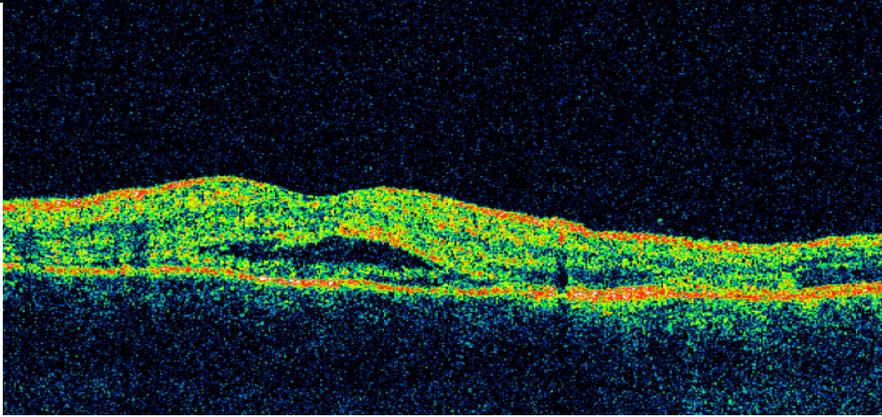






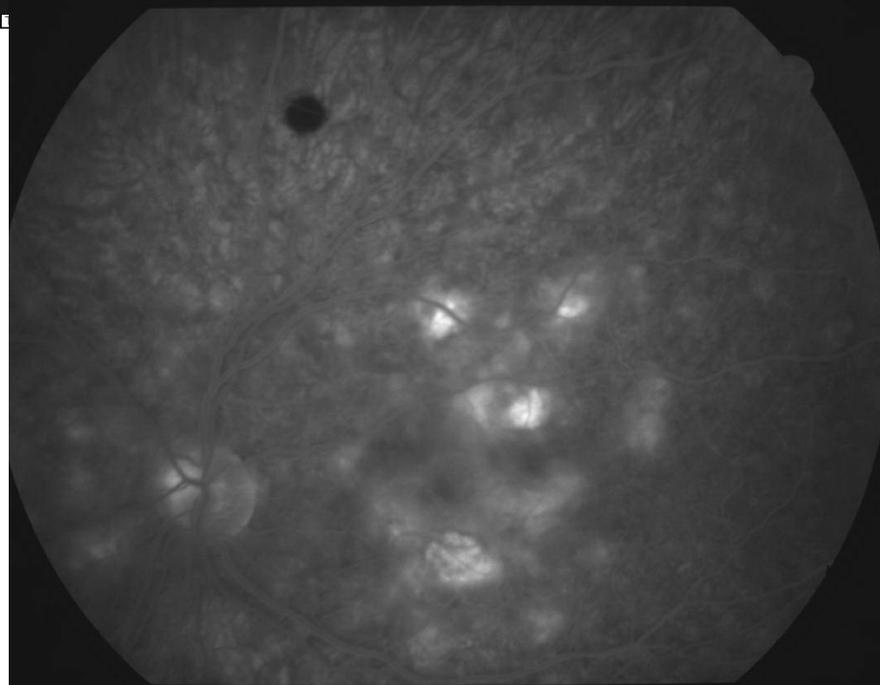
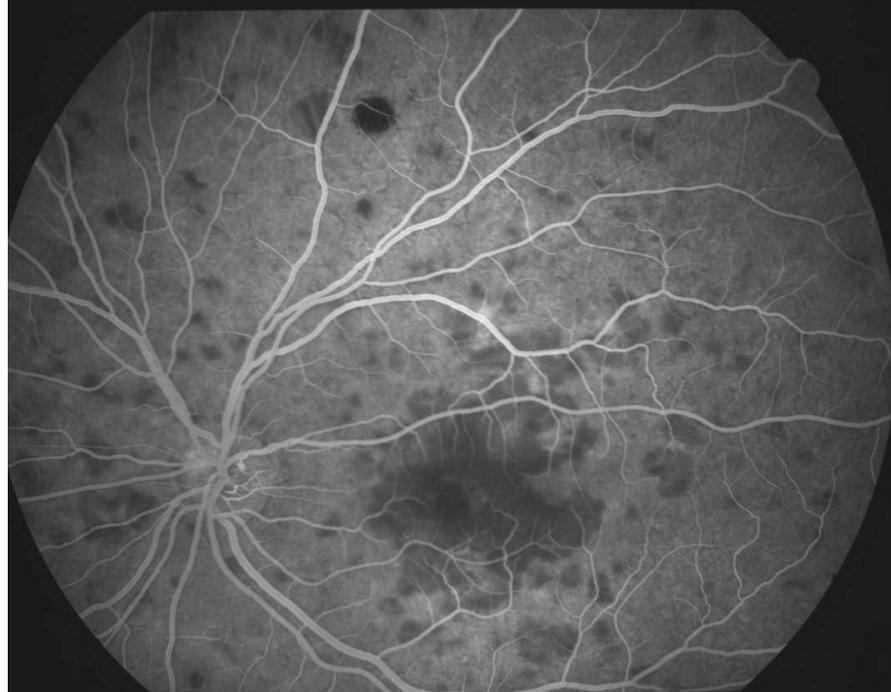
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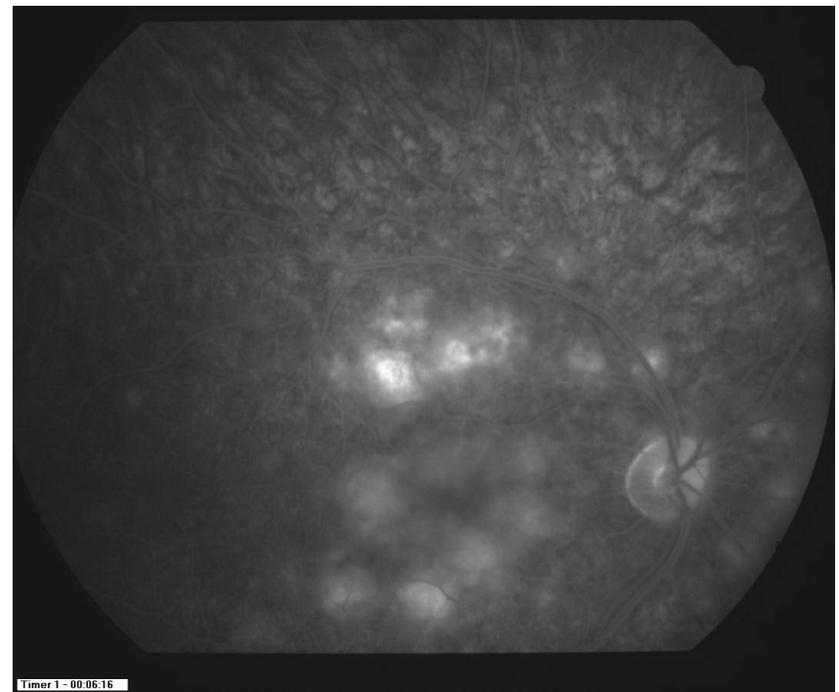
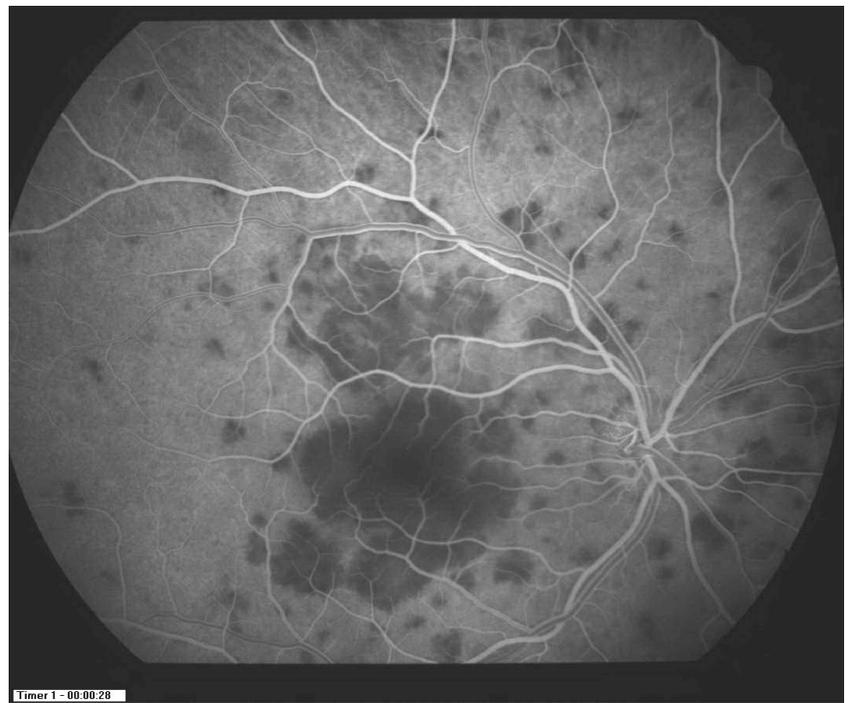
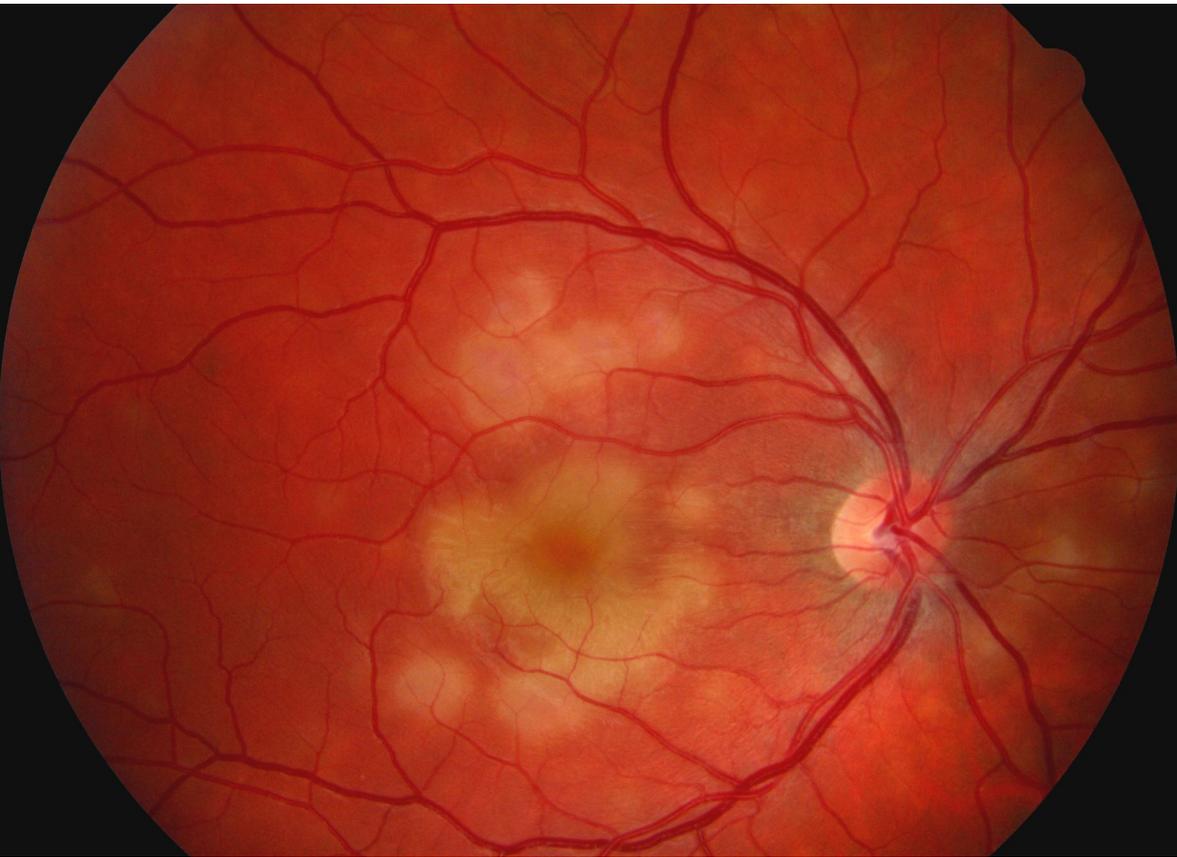


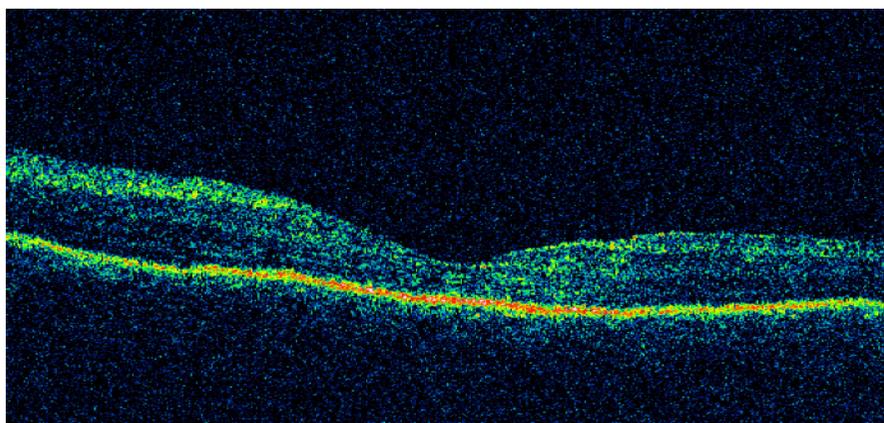
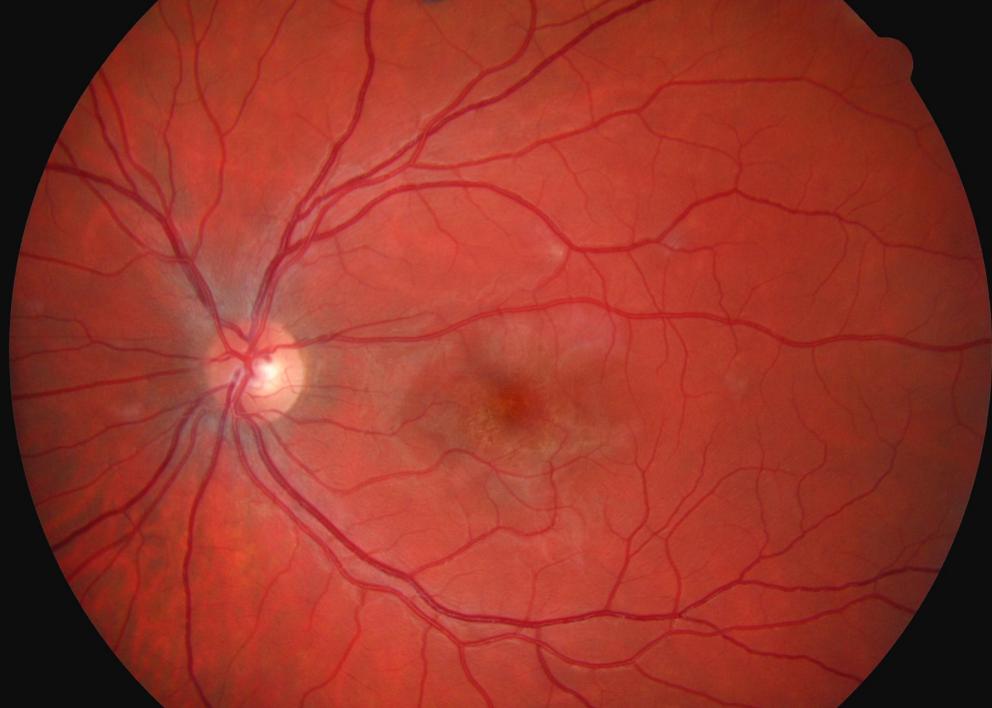


AV 1/20

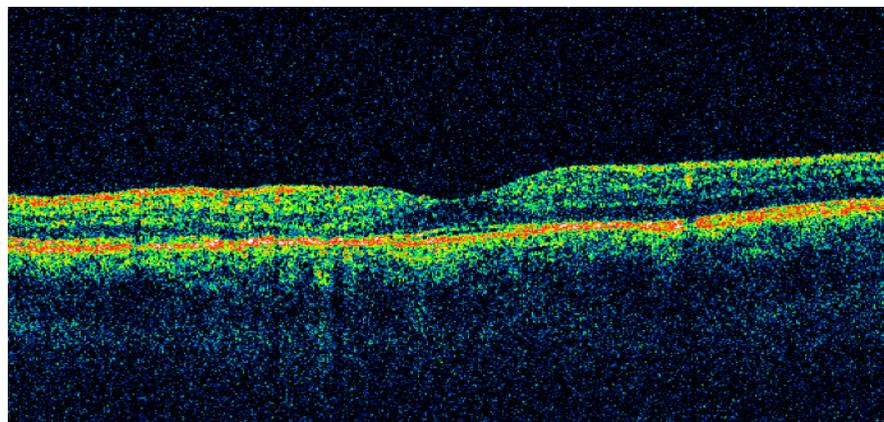
AV 4/10







AV 10/10



AV 10/10