

Cas clinique

Dr Desbois, Dr Maestri

Congrès C 3 - Pitié Salpêtrière

25/11/2022



**SORBONNE
UNIVERSITÉ**



HÔPITAUX UNIVERSITAIRES
**PITIÉ SALPÊTRIÈRE
CHARLES FOIX**

FEMME 30 ANS LUPUS ETYTHEMATEUX DISSEMINÉ

ATTEINTE CUTANÉE, ARTICULAIRE

IRC DIALYSÉE ET HTAP

TT : IMUREL 50MG, PLAQUENIL 200MG

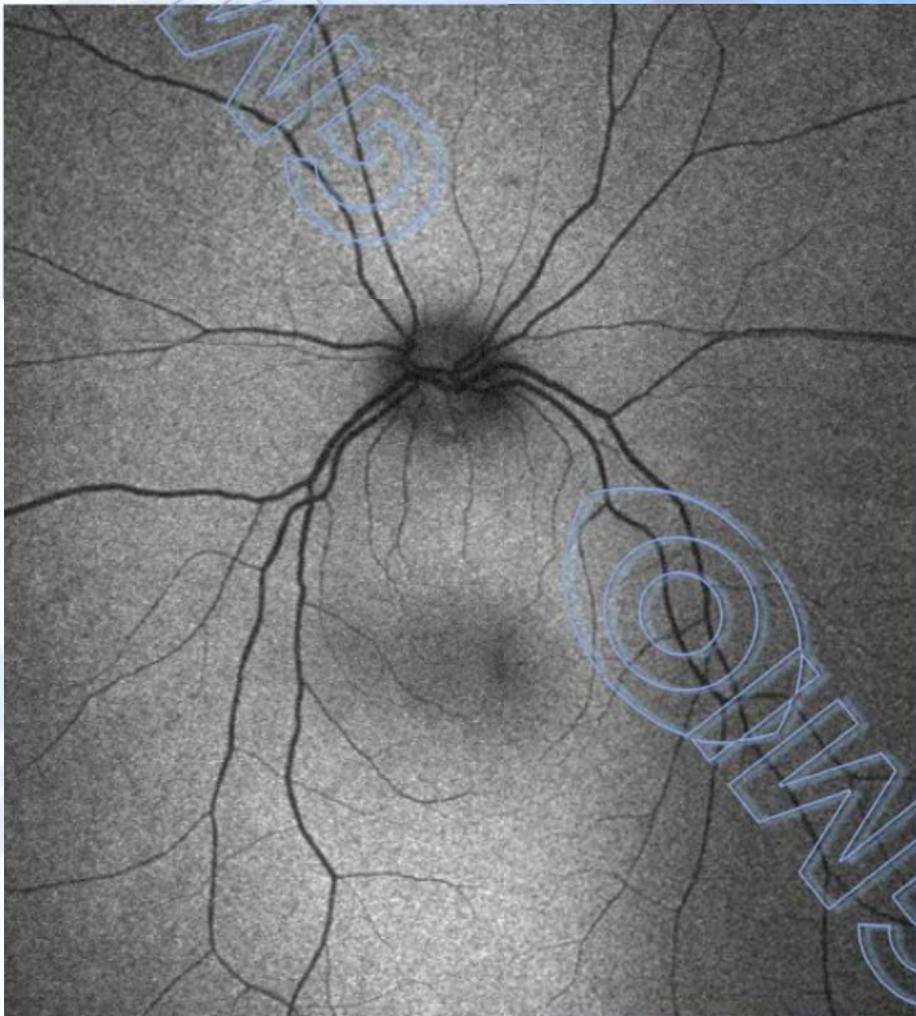
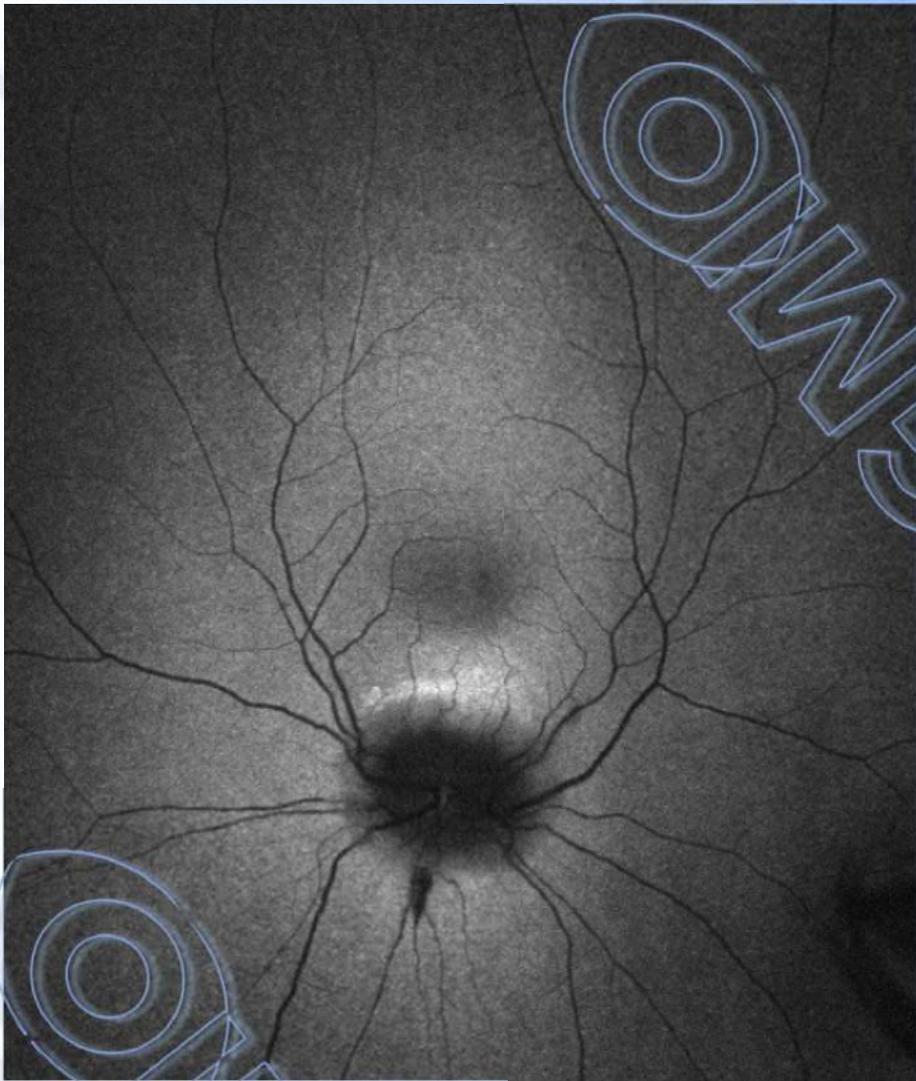
CS 02/2021 POUR SUIVI PLAQUENIL, ARRIVE DILATÉE, PAS DE SF mises à part des céphalées

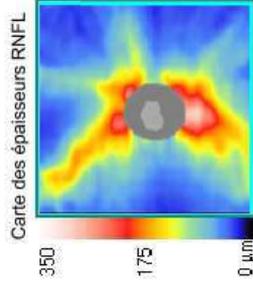
**SUIVI PLAQUENIL / FEMME AVEC LUPUS SEVERE IRC
TERMINALE HTAP**

OD : AV 10/10, PIO 18, HHC, FO SANS ANOMALIES, EXOPHTALMIE

OG : AV 7/10, PIO 18, HHC, OP STADE 4 AVEC HGIES, EXOPHTALMIE

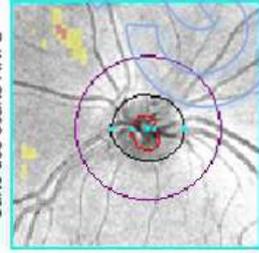




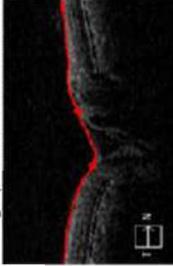


	OD	OS
Épaisseur moyenne RNFL	104 µm	482 µm
Symétrie RNFL	82%	
Aire de l'ANR	1,76 mm ²	2,37 mm ²
Aire du disque	2,18 mm ²	2,34 mm ²
Rapport CID moyen	0,44	0,08
Rapport C/D vertical	0,35	0,09
Volume de l'excavation	0,031 mm ³	0,001 mm ³

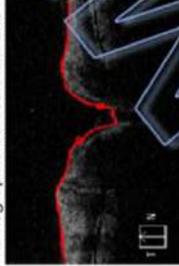
Carte des écarts RNFL



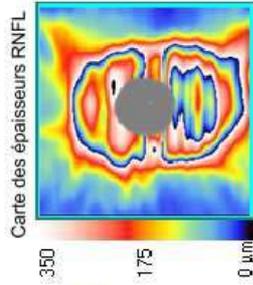
Centre du disque(-0,12,-0,24)mm
Tomographie horizontale extraite



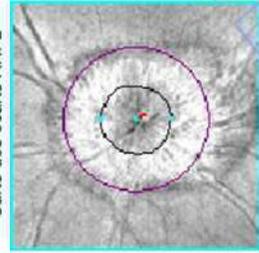
Tomographie verticale extraite



Tomographie circulaire RNFL



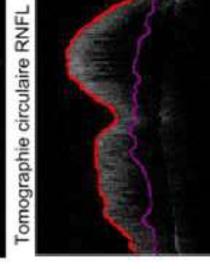
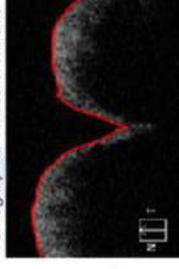
Carte des écarts RNFL



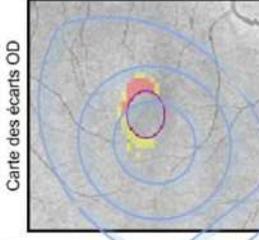
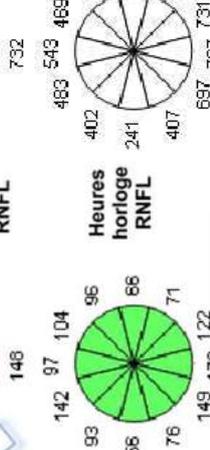
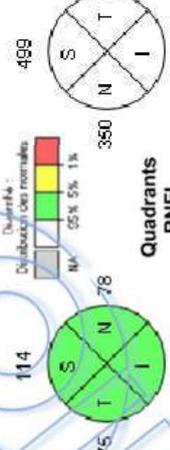
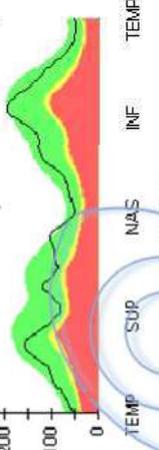
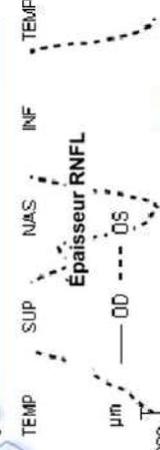
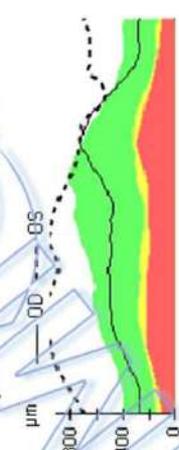
Centre du disque(0,12,0,03)mm
Tomographie horizontale extraite



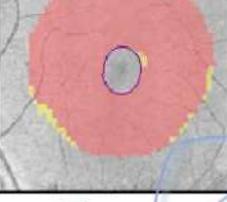
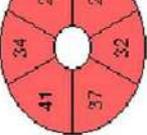
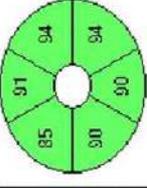
Tomographie verticale extraite



Épaisseur du bord de la neuro-rétine



Secteurs OD

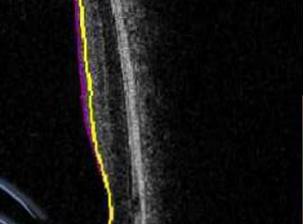


	OD µm	OS µm
Épaisseur moyenne du GCL	91	32
Épaisseur GCL minimum	85	19

Examen B horizontal



Examen B horizontal

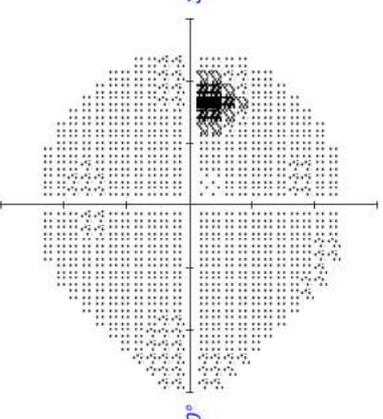


Pertes de fixation: 0/17
 Erreurs faux pos.: 1%
 Erreurs faux nég.: 10%
 Durée du test: 08:54
 Fovéa: 30 dB

Pertes de fixation: 1/14
 Erreurs faux pos.: 0%
 Erreurs faux nég.: 2%
 Durée du test: 06:55
 Fovéa: 32 dB

SITA Standard Âge: 24

SITA Standard Âge: 24



-7 -15 -5 -5	-1 -9 1 1	-1 0 0 2
-10 -8 -13 -8 -9 -9	-4 -2 -7 -2 -3 -3	0 -2 -4 -5 1 0
-7 -11 -10 -11 -7 -7 -8 -8	-1 -5 -4 -5 -1 -1 -3 -2	-2 -2 -3 -3 -4 -2 0 1
-20 -23 -9 -8 -7 -7 -6 -6	-14 -17 -3 -2 -1 -1 0 0	-4 -4 -4 -4 -2 -2 -3 -4
-21 -18 -6 -6 -7 -14 -9 -16	-15 -12 0 0 -1 -8 -3 -10	-6 -1 -3 -5 -3 -1 -3 -1
-8 -16 -10 -6 -14 -6 -12 -6	-2 -10 -4 -2 -8 0 -6 -3	-1 -2 -3 -2 -3 -2 0 -3
-7 -9 -8 -7 -12 -16	-1 -3 -2 -1 -6 -10	-2 -2 -3 -5 -2 -1
-5 -8 -5 -9	1 -2 1 -3	-8 -1 -1 -2

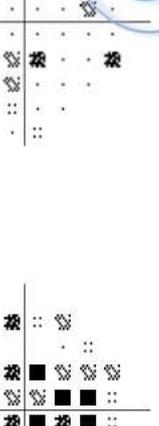
-4 -2 -3 0	-7 -7 -7 -6 -5 -4 -5 -7	-4 -2 -3 0
-2 -4 -6 -8 -2 -2	-8 -4 -5 -7 -6 -4 -6 -3	0 -2 -4 -5 1 0
-5 -4 -5 -6 -6 -5 -3 -2	-4 -4 -6 -5 -4 -3 -5	-2 -2 -3 -3 -4 -2 0 1
-7 -7 -7 -6 -5 -4 -5 -7	-4 -5 -6 -7 -5 -4	-4 -4 -4 -4 -2 -2 -3 -4
-8 -4 -5 -7 -6 -4 -6 -3	-10 -3 -4 -5	-6 -1 -3 -5 -3 -1 -3 -1
-4 -4 -6 -5 -5 -4 -3 -5		-1 -2 -3 -2 -3 -2 0 -3
-4 -5 -6 -7 -5 -4		-2 -2 -3 -5 -2 -1
-10 -3 -4 -5		-8 -1 -1 -2

THG: Abaissement général de la sensibilité

THG: Hors limites normales

VFI: 96%
 MD24-2: -5,04 dB P < 0,5%
 PSD24-2: 1,72 dB

VFI: 87%
 MD24-2: -9,61 dB P < 0,5%
 PSD24-2: 4,44 dB P < 0,5%



Deviation Totale

Deviation Totale

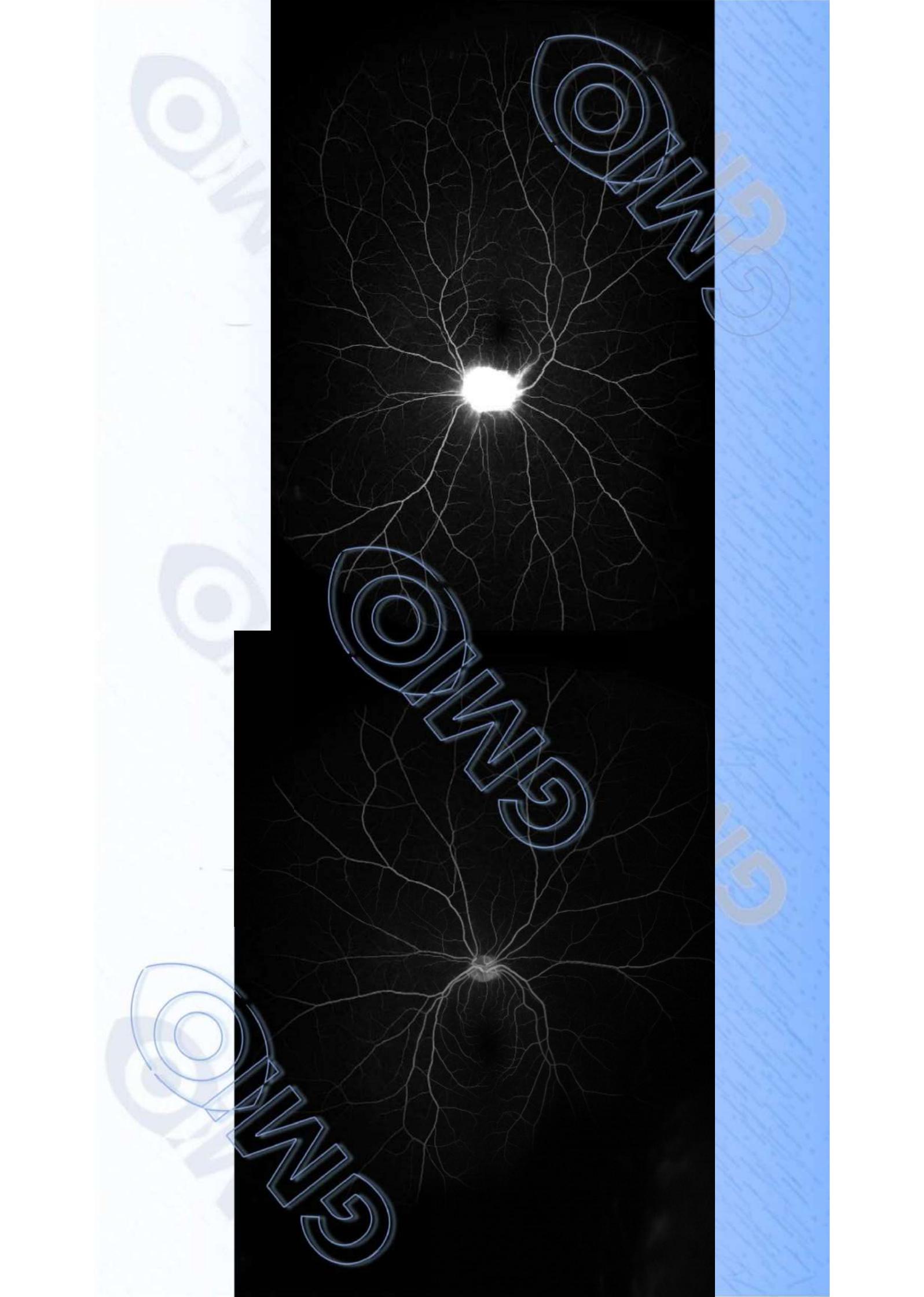
Legend:
 :: P < 5%
 ☼ P < 2%
 ☼ P < 1%
 ■ P < 0,5%

Legend:
 :: P < 5%
 ☼ P < 2%
 ☼ P < 1%
 ■ P < 0,5%

Deviation individuelle

Legend:
 :: P < 5%
 ☼ P < 2%
 ☼ P < 1%
 ■ P < 0,5%

Legend:
 :: P < 5%
 ☼ P < 2%
 ☼ P < 1%
 ■ P < 0,5%



FEMME AVEC LUPUS SEVERE IRC TERMINALE HTAP

OP OG ASSOCIÉ À ÉLARGISSEMENT TA +/- ATTEINTE CV PÉRIPH

FEMME AVEC LUPUS SEVERE IRC TERMINALE HTAP

OP OG ASSOCIÉ À ÉLARGISSEMENT TA +/- ATTEINTE CV PÉRIPH

HD

PAPILLITE

NOIAA SECONDAIRE AU LUPUS

NOI SECONDAIRE AU LUPUS

HTIC

FEMME AVEC LUPUS SEVERE IRC TERMINALE HTAP

OP OG ASSOCIÉ À ÉLARGISSEMENT TA +/- ATTEINTE CV PÉRIPH

HD

PAPILLITE

NOIAA SECONDAIRE AU LUPUS

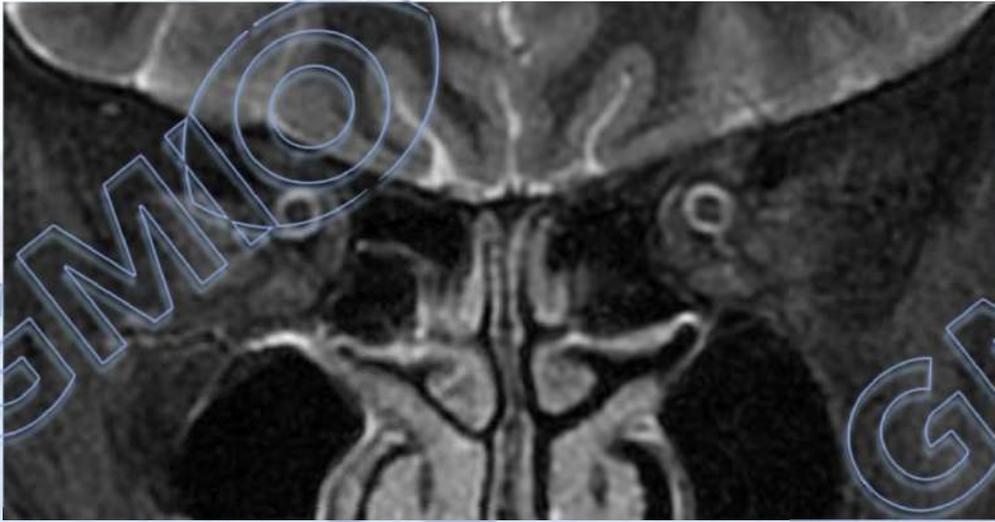
NOI SECONDAIRE AU LUPUS

HTIC SUR HTAP

BILAN

IRM SNC + NO AVEC INJECTION PDC

BILAN INFLAMMATOIRE



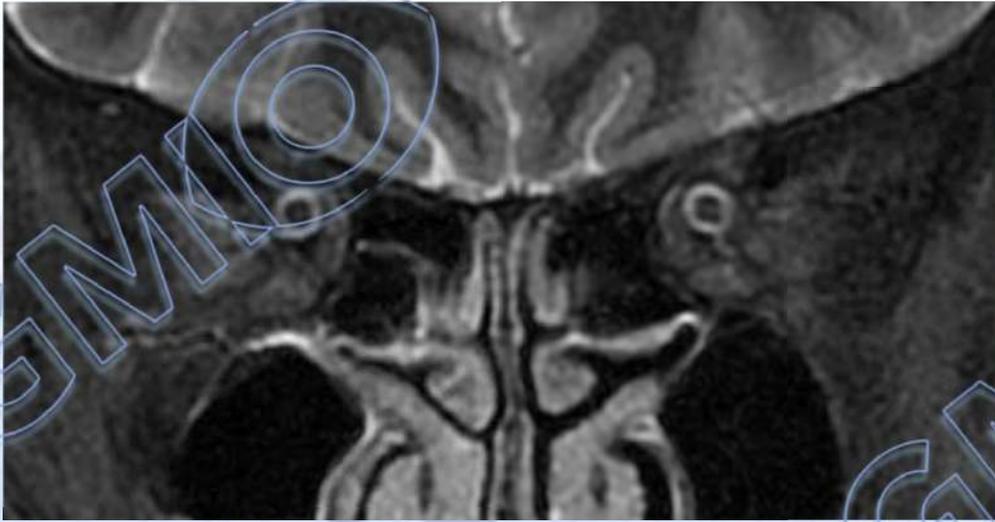
GENE AU DRAINAGE SINUS CAV. DT AVEC DILATATION
V. OPHTALMIQUE

EXOPHTALMIE

ARTÉRIALISATION DU SINUS PÉTREUX

PL PO 40 cmH2O





GENE AU DRAINAGE SINUS CAV. DT AVEC DILATATION
V. OPHTALMIQUE

EXOPHTALMIE

ARTÉRIALISATION DU SINUS PÉTREUX

PL PO 40 cmH₂O



**STÉNOSE CERVICO-
THORACIQUE ??**

RECHERCHE STÉNOSE CERVICO-THORACIQUE

TDM THORACIQUE : STÉNOSE LONGUE SERRÉE
DU TRONC INNOMINÉ DROIT



DILATATION DU TRONC INNOMINÉ LE 26/02/2021

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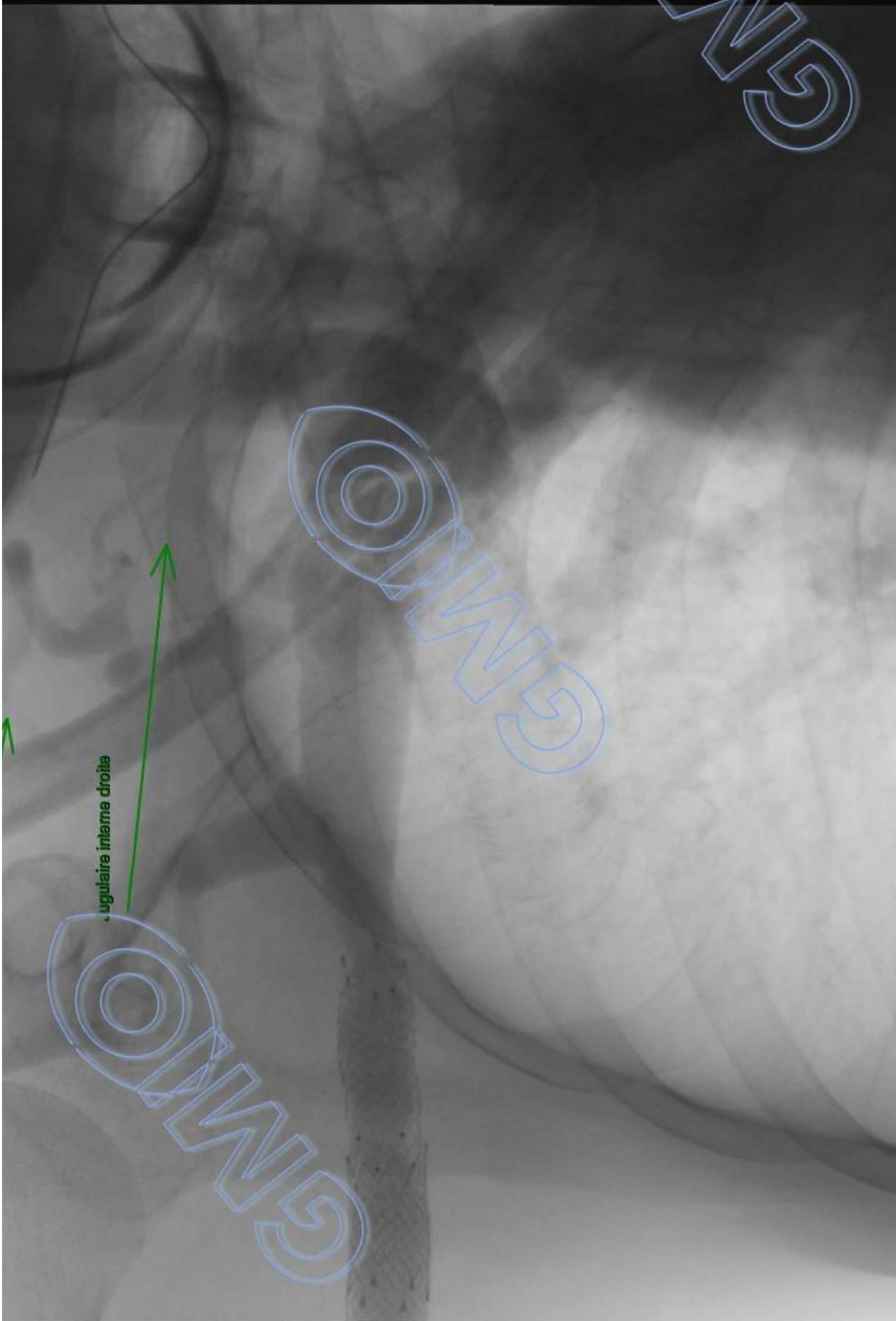
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Jugulaire interne droite

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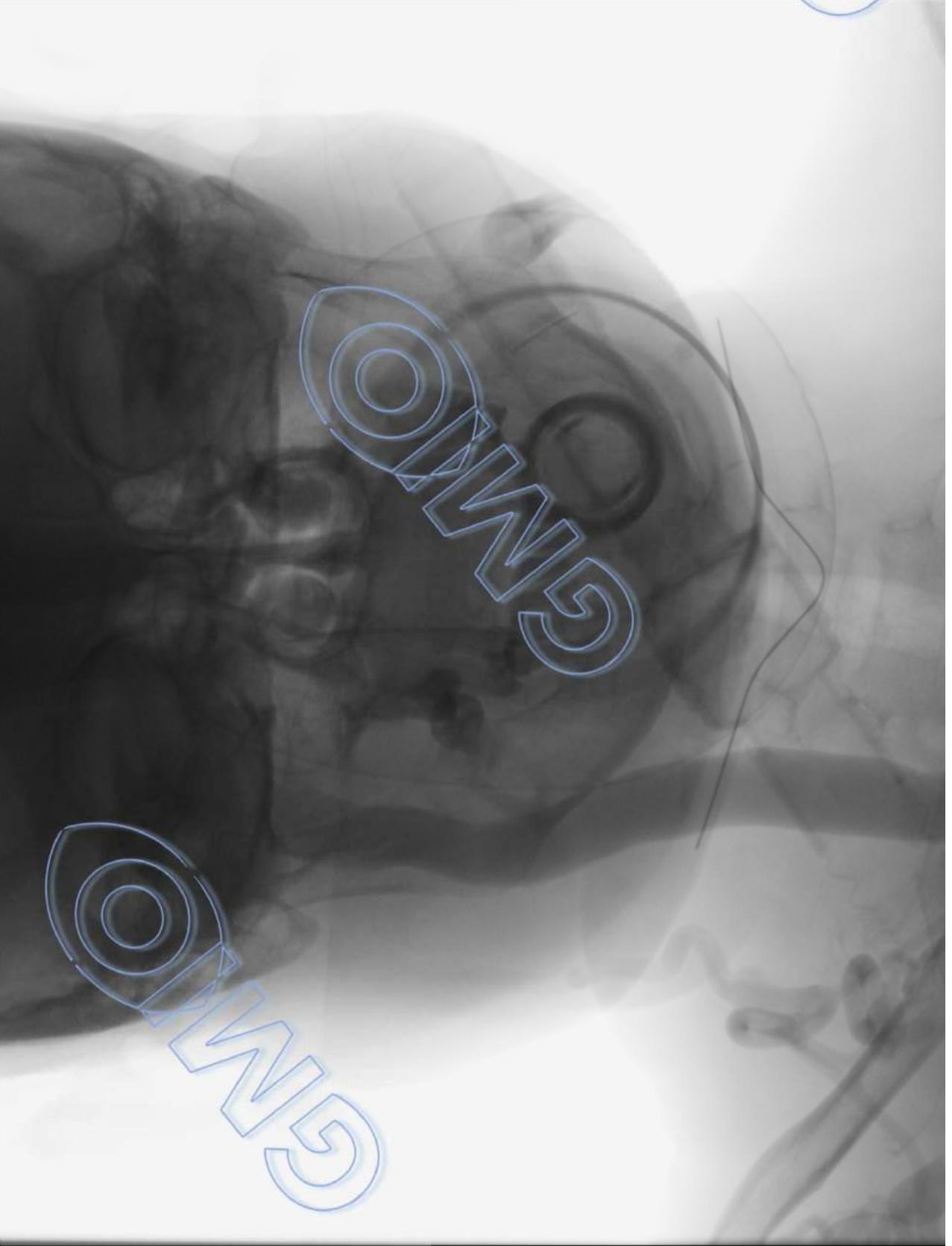
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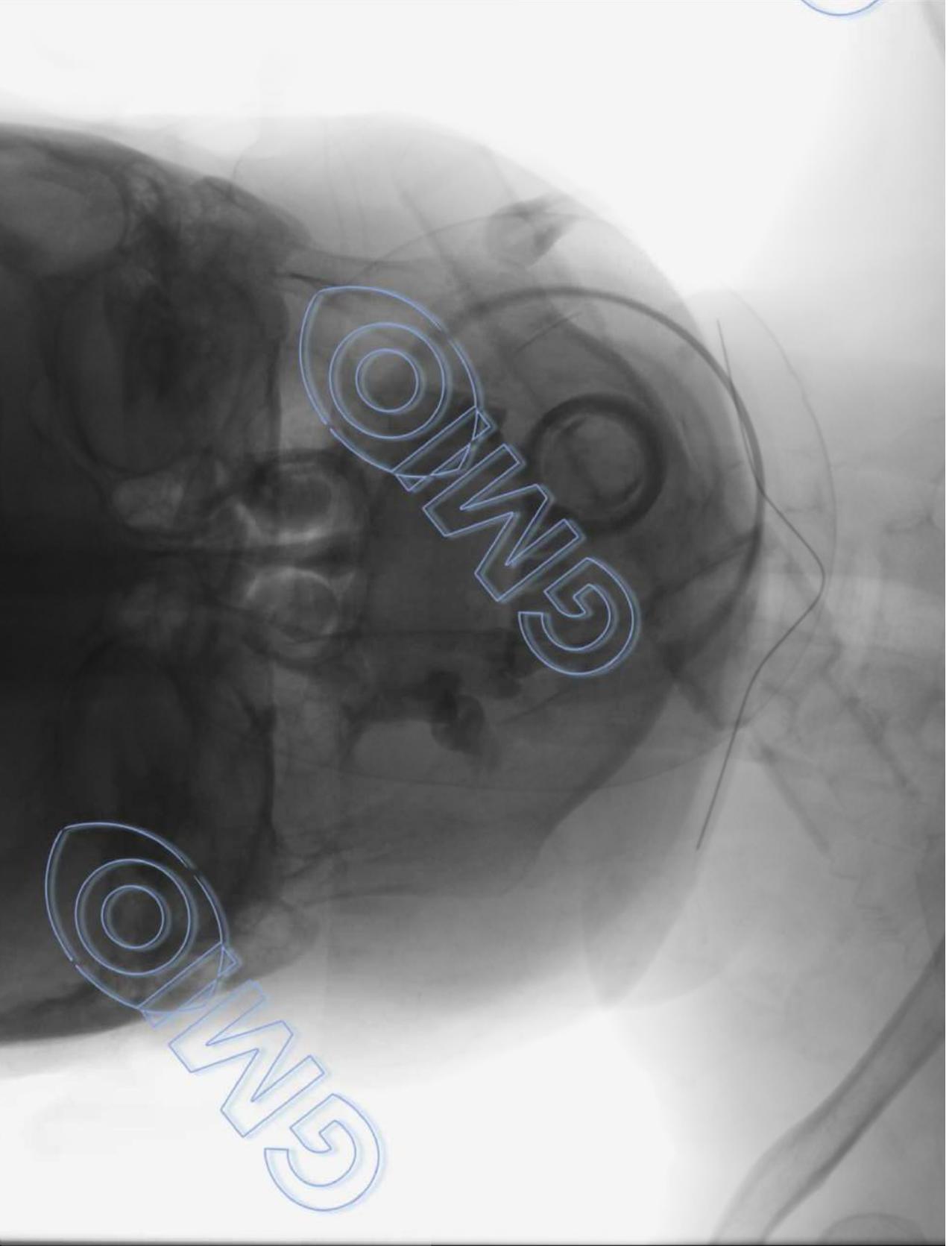
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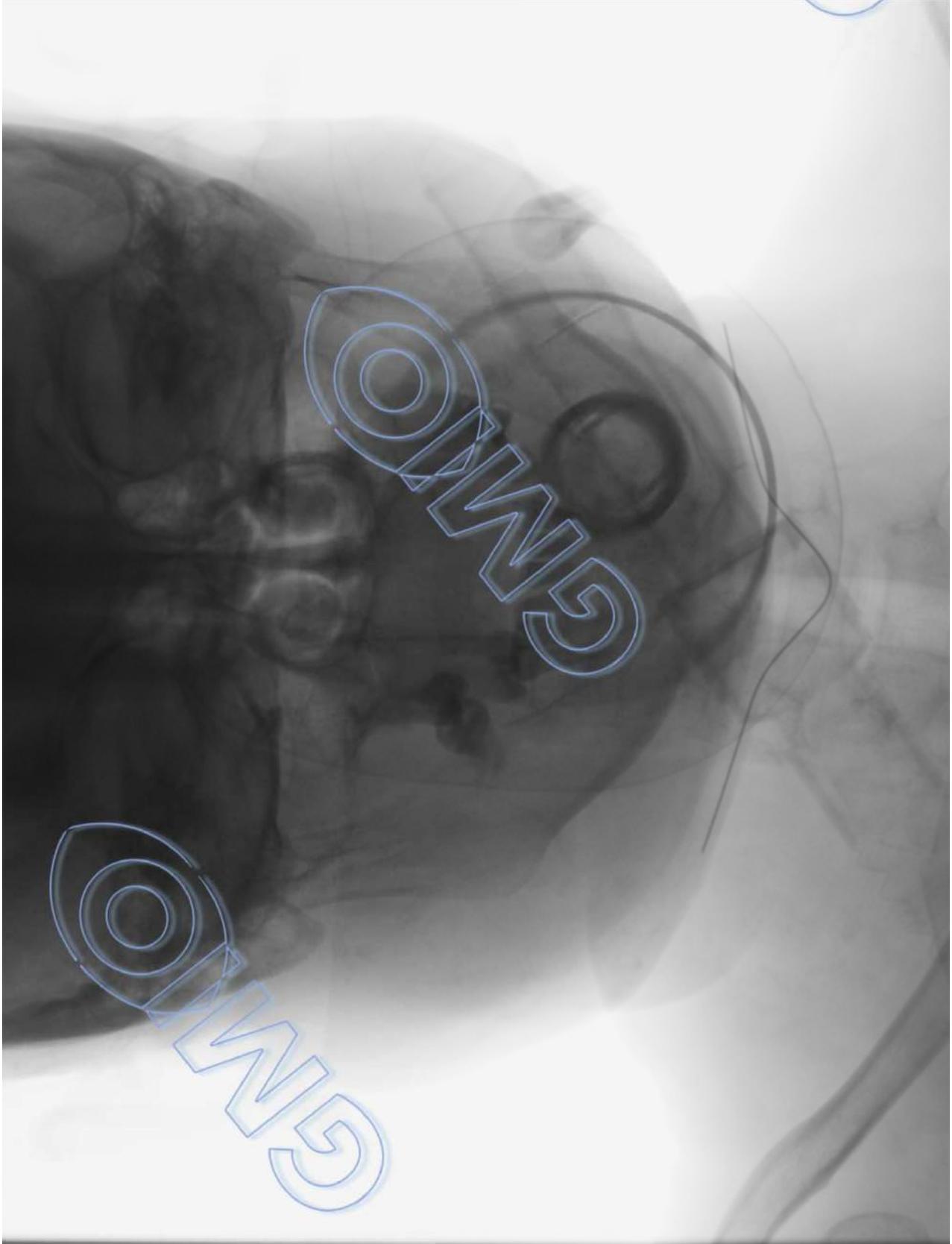
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Acute Intracranial Hypertension due to Occlusion of the Brachiocephalic Vein in a Patient Undergoing Hemodialysis

Hideaki Nishimoto¹, Kuniko Ogasawara², Keiyoaki Miura³, Shinichi Ohmura⁴, Hiroshi Kashiwara⁵, Akira Ogawa⁶
¹Department of Neurosurgery, Iwate Prefectural Kuji Hospital, Kuji, ²Department of Neurosurgery, Iwate Medical University, Morioka, Japan

Introduction

Stenoses and occlusions of central veins may occur after repeated or prolonged cannulization for hemodialysis access [1–3]. If the draining vein of a functioning shunt is obstructed, extreme venous hypertension can develop and result in pain, incapacitating swelling, and venous stasis ulcers of the arm, chest, neck and face on the ipsilateral side [4, 5]. A few reports have suggested that intracranial venous hypertension may also occur in the context of peripheral venous obstruction [6, 7]. We report a case of acute intracranial hypertension due to occlusion of the brachiocephalic vein in a patient undergoing hemodialysis.

A 62-year-old woman, who had undergone ongoing hemodialysis for 9 years via a left arm arteriovenous fistula, presented with dyspnea and was admitted to a local hospital. Physical and radiological examinations demonstrated pulmonary edema due to volume overload, presumably related to underdialysis. Venography was performed via the left arteriovenous fistula from the left subclavian artery and showed stenosis of the left brachiocephalic vein. The patient underwent percutaneous angioplasty and stenting through the right femoral vein without difficulty. On the day following percutaneous angioplasty and stenting for stenosis of the left brachiocephalic vein, the patient underwent hemodialysis uneventfully. Blood chemistries before hemodialysis showed elevations in urea nitrogen (64.0 mg/dl) and creatinine (6.8 mg/dl). Following dialysis, these values decreased to the normal range (urea nitrogen of 10.2 mg/dl and creatinine of 0.4 mg/dl). Serum sodium and calcium were within normal limits both before and after hemodialysis. Hypotension did not occur during the procedure. However, on the second postoperative day, the patient experienced abrupt onset of headache and generalized seizures. Systemic blood pressure measured at this time was 200/105 mm Hg. The patient was transferred to our Department for further evaluation and care. On admission, the patient was comatose. Systemic blood pressure was 180/100 mm Hg, and physical examination was notable for the absence of dilated veins on the chest, neck or face. Blood chemistry revealed a slightly elevated serum urea nitrogen of 1.2 mg/dl. Computed tomography and magnetic resonance imaging showed no abnormal finding. Venography of the left arteriovenous fistula via the left subclavian artery demonstrated occlusion of the left brachiocephalic vein and reflux of the left brachial

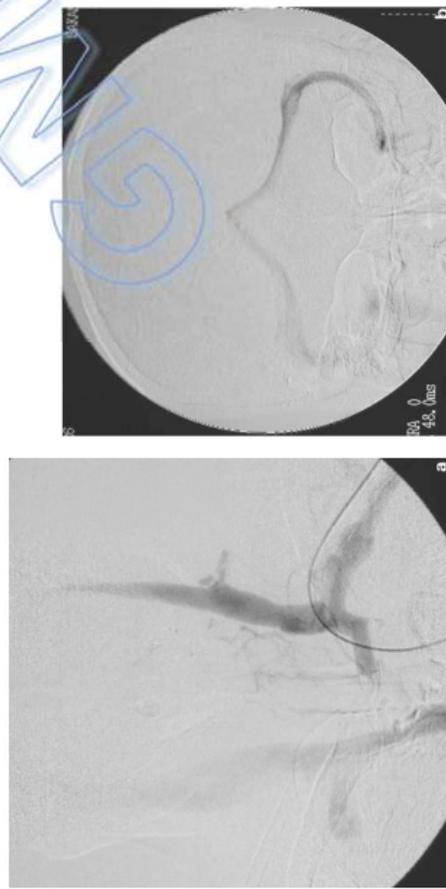


Fig. 1. Venography of the left arteriovenous fistula via the left subclavian artery. **a** The left brachiocephalic vein is occluded and the left brachial venous flow refluxes to the left jugular vein. **b** The reflux venous flow drains into the contralateral jugular vein through the left sigmoid, left transverse, right transverse, and right sigmoid veins.

[A case of hemodialysis-associated innominate vein stenosis inducing superior vena cava syndrome]

[Article in Japanese]

K. Ataka¹, M. Sakata, H. Wakiyama, Y. Tsuji, C. Yamashita, M. Okada

Affiliations + expand
PMID: 9341264

Abstract

Twenty years after making an arteriovenous shunt in the left arm, a 45-year-old man on hemodialysis developed progressive swelling in the face to left arm and venous dilatation on the left anterior chest. Venogram disclosed severe stenosis of the left innominate vein at the junction of the superior vena cava, which was considered to be a primary lesion because he had no history of subclavian vein cannulation or mediastinal disease. Surgical resection of the stenotic lesion and direct anastomosis of the innominate vein resulted in a rapid recovery of the symptom of venous hypertension. This is a rare case of hemodialysis-associated large vein complication leading to superior vena cava syndrome.

Review > Acta Neurol Belg, 2022 Feb;122(1):1-9. doi: 10.1007/s13760-021-01719-w.
Epub 2021 Jun 6.

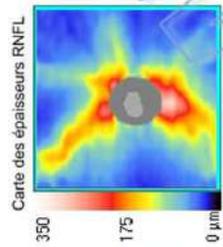
Brain arteriovenous malformations and dural arteriovenous fistulas with extensive venous congestive encephalopathy

Kun Hou¹, Ying Song¹, Yunbao Guo¹, Jirulu Yu²

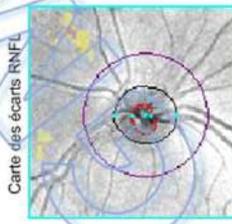
Affiliations + expand
PMID: 34095979 DOI: 10.1007/s13760-021-01719-w

Abstract

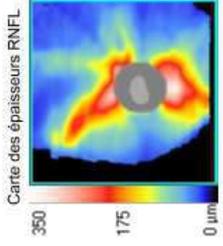
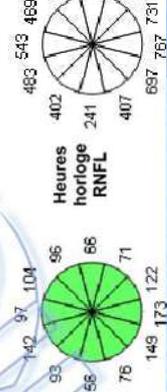
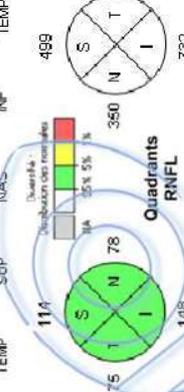
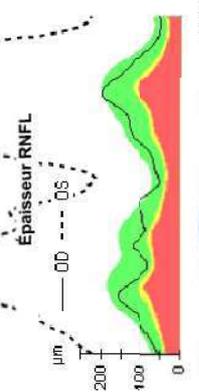
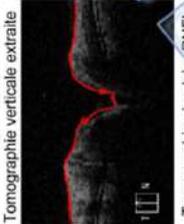
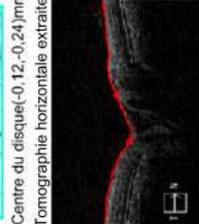
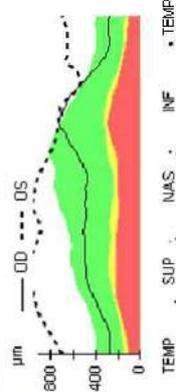
In brain arteriovenous malformations (BAVMs) and dural arteriovenous fistulas (DAVs), when too much blood is drained into the venous system, extensive venous congestive encephalopathy (EVCE) can appear. EVCE in BAVMs and DAVFs can be divided into acute and chronic stages. BAVMs and DAVFs have their own classification systems, but EVCE is not considered in these classification systems and needs to be emphasized. EVCE in BAVMs and DAVFs has unique clinical and imaging features. The clinical presentations usually consist of headache, cognitive impairment and focal deficits. EVCE in BAVMs and DAVFs has several imaging features, and the venous congestion seen on computed tomography angiography and magnetic resonance angiography can present with the angiographic features of venous reflux and pycnoplephalic pattern. Digital subtraction angiography is the gold standard for the diagnosis. Delayed circulation time is observed. Tortuous, dilated, and engorged veins can be seen. For EVCE from BAVMs and DAVFs, prompt treatment is warranted due to the impairment of extensive brain tissue. Treatment includes endovascular treatment (EVT), open surgery, and radiosurgery. EVT is often the primary treatment. Complete elimination in one stage is often difficult. Most of the time, staged treatment has to be chosen. No matter at the acute or chronic stage, aggressive treatment is recommended.



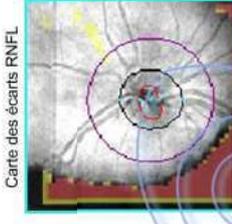
	OD	OS
Épaisseur moyenne RNFL	104 µm	482 µm
Symétrie RNFL	82%	
Aire de l'ANR	1,76 mm ²	2,37 mm ²
Aire du disque	2,18 mm ²	2,34 mm ²
Rapport C/D moyen	0,44	0,08
Rapport C/D vertical	0,35	0,09
Volume de l'excavation	0,061 mm ³	0,001 mm ³



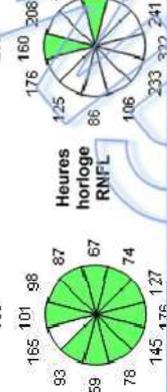
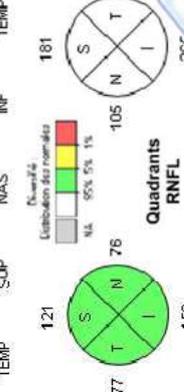
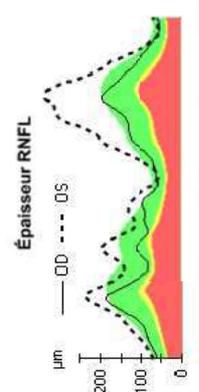
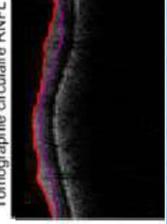
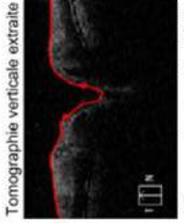
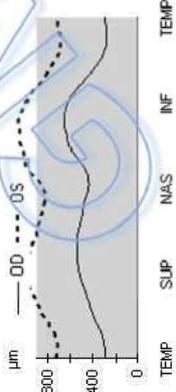
Épaisseur du bord de la neuro-rétine



	OD	OS
Épaisseur moyenne RNFL	106 µm	162 µm
Symétrie RNFL	93%	
Aire de l'ANR	1,77 mm ²	2,92 mm ²
Aire du disque	2,24 mm ²	2,95 mm ²
Rapport C/D moyen	0,45	0,11
Rapport C/D vertical	0,34	0,10
Volume de l'excavation	0,078 mm ³	0,008 mm ³



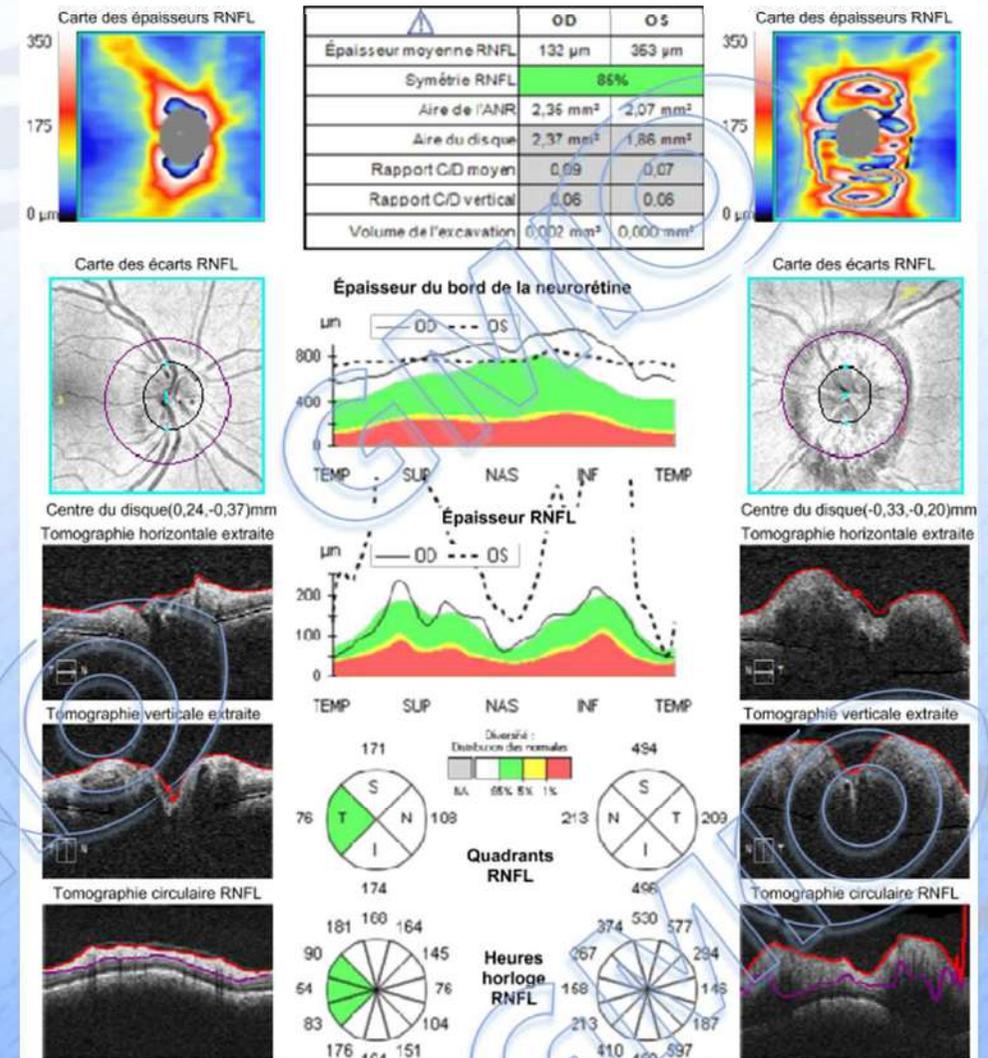
Épaisseur du bord de la neuro-rétine



REVIENT POUR SENSATION DE FLOU VISUEL

OD : AV 10/10, PIO 13, HHC, OP STADE 1, EXOPHTALMIE

OG : AV 10/10, PIO 12, HHC, OP STADE 4, EXOPHTALMIE



Âge: 25

SITA Standard

Stratégie: SITA Standard
Diam. pupille:
Acuité visuelle:
Rx: +0,75 DS -1,25 DC X 95

1/15
0%
0%
06:36
35 dB

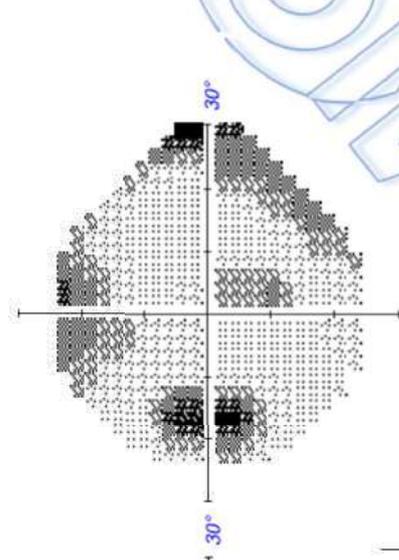
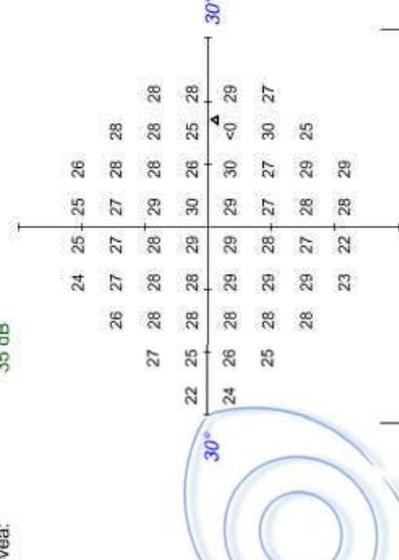
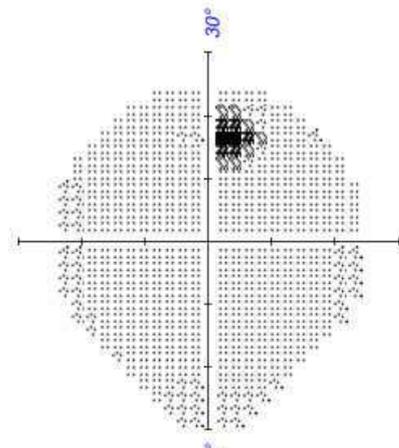
Âge: 25

SITA Standard

Stratégie: SITA Standard
Diam. pupille:
Acuité visuelle:
Rx: +1,00 DS

0/18
3%
11%
08:21
35 dB

Pertes de fixation:
Erreurs faux pos.:
Erreurs faux nég.:
Durée du test:
Fovéa:



24	25	26	30°					
26	27	27	28	28				
27	28	28	29	28	28			
22	25	28	28	29	30	26	25	28
24	28	28	29	29	30	<0	29	
25	28	29	28	27	30	27		
28	29	27	28	29	25			
23	22	28	29					

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

-5	-5	-5	-3				
-5	-4	-5	-4	-3	-2		
-4	-4	-5	-6	-4	-4	-3	
-7	-6	-5	-5	-4	-8	-3	
-5	-6	-5	-5	-6	-4	-2	
-5	-4	-4	-5	-7	-6	-3	-4
-3	-3	-6	-4	-3	-7		
-7	-9	-3	-2				

-9	-14	-15	-7				
0	-3	-11	-9	-2	-5		
2	0	-5	-6	-2	0	-6	
-4	-6	-5	-4	-1	0	-3	-27
-8	-4	0	-14	0	-1	-12	-15
-1	-4	-3	0	-15	-2	-8	-15
-1	1	-2	0	-8	-15		
-2	-4	-4	-8				

-14	-18	-19	-12				
-5	-7	-15	-14	-7	-10		
-3	-5	-10	-11	-6	-4	-11	
-9	-10	-9	-9	-6	-4	-8	-31
-13	-9	-5	-19	-4	-6	-16	-19
-6	-8	-4	-19	-6	-13	-19	
-5	-4	-6	-5	-12	-20		
-6	-8	-9	-12				

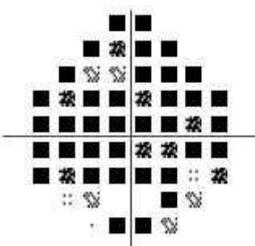
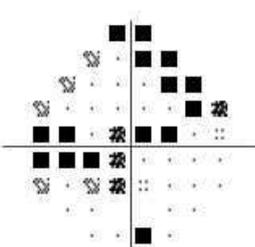
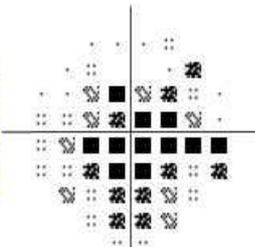
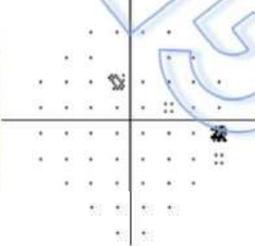
THG: Abaissement général de la sensibilité
VFI: 98%
MD24-2: -4,72 dB P < 0,5%
PSD24-2: 1,48 dB

Déviatiion Totale

Déviatiion individuelle

Déviatiion Totale

Déviatiion individuelle



:: P < 5%
: P < 2%
: P < 1%
■ P < 0,5%

:: P < 5%
: P < 2%
: P < 1%
■ P < 0,5%

FEMME AVEC LUPUS SEVERE IRC TERMINALE HTAP

OP BILATERAL SANS FRANCHE ATTEINTE CV SAUF ELARGISSEMENT TA

ATCD STENOSE TRONC INNOMINE

FEMME AVEC LUPUS SEVERE IRC TERMINALE HTAP

OP BILATERAL SANS FRANCHE ATTEINTE CV SAUF ELARGISSEMENT TA

ATCD STENOSE TRONC INNOMINE

BILAN

IRM SNC + NO : PAS DE NOI, ENGORGEMENT VEINEUX ORBITES

PL AVEC PRESSION OUVERTURE 50CMH2O

TDM THORACIQUE RETROUVE STÉNOSE LONGUE SERRÉE DU TRONC INNOMINÉ DROIT

FEMME AVEC LUPUS SEVERE IRC TERMINALE HTAP

OP BILATERAL SANS FRANCHE ATTEINTE CV SAUF ELARGISSEMENT TA

ATCD STENOSE TRONC INNOMINE

BILAN

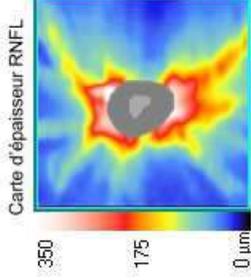
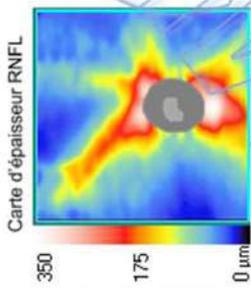
IRM SNC + NO : PAS DE NOI, ENGORGEMENT VEINEUX ORBITES

PL AVEC PRESSION OUVERTURE 50CMH2O

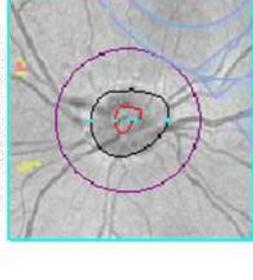
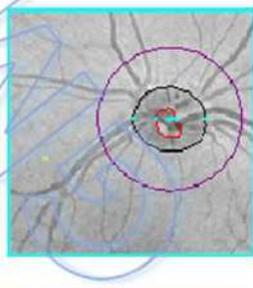
TDM THORACIQUE RETROUVE STÉNOSE LONGUE SERRÉE DU TRONC INNOMINÉ DROIT

TTT

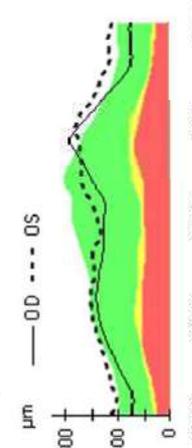
DILATATION DU TRONC INNOMINÉ PAR ANGIOPLASTIE LE 09/02/2022



	OD	OS
Épaisseur moyenne de la RNFL	117 µm	105 µm
Symétrie RNFL	88%	
Area de l'ANR	1,80 mm²	2,11 mm²
Area du disque	2,15 mm²	2,40 mm²
Rapport C/D moyen	0,40	0,35
Rapport C/D vertical	0,31	0,31
Volume de l'excavation	0,040 mm³	0,040 mm³

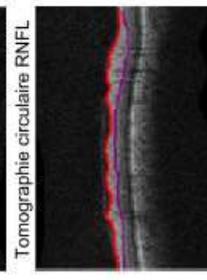
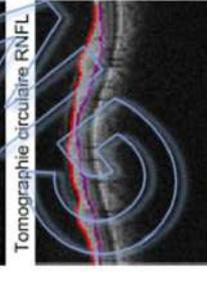
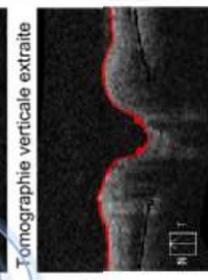
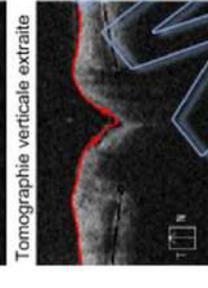
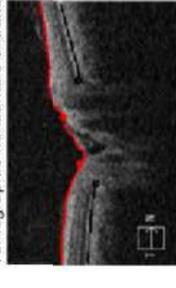


Épaisseur du bord de la neurorétine

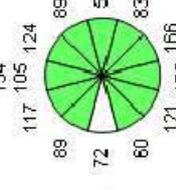
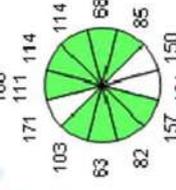


Centre du disque(0,30,-0,87)/mm

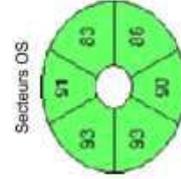
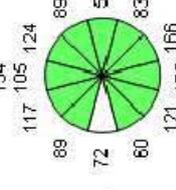
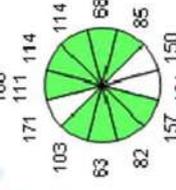
Centre du disque(-0,12;0,12)/mm



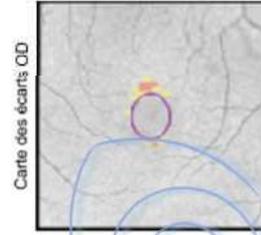
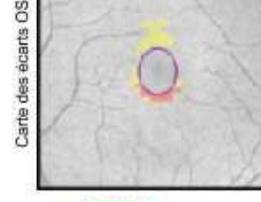
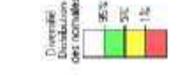
Quadrants RNFL



Heures horloge RNFL

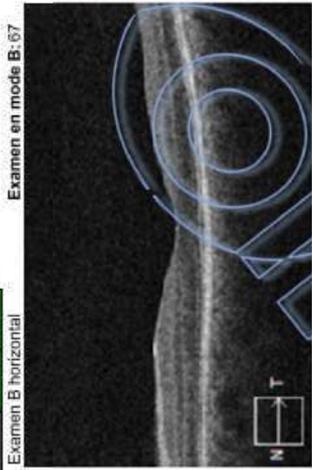


	OD µm	OS µm
Épaisseur moyenne du GCL	95	89
Épaisseur GCL minimum	99	76



Examen B horizontal

Examen B horizontal



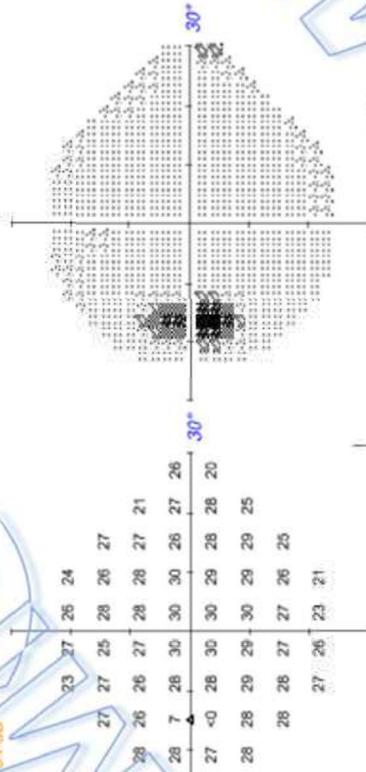
Pertes de fixation:
Erreurs faux pos.:
Erreurs faux nég.:
Durée du test:
Fovéa:

0/15
1%
0%
05:58
34 dB

Stratégie:
Diam. pupille:
Acuité visuelle:
Rx: +0.50 DS

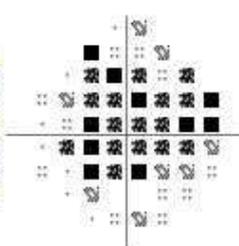
SITA Standard

Âge: 26



-6	-2	-3	-6	-3	1	0	-3							
-3	-3	7	3	-5	3	0	0	0	2	0				
-3	-6	-7	-5	-5	-10	1	-3	-3	-2	-2	-7			
4	-5	-4	-5	-4	-7	4	-3	0	-2	-1	-3	-1	0	
-5	-6	-5	-4	-5	-5	-4	-8	-2	-2	-1	-2	-2	0	-6
-3	-4	-4	-5	-4	-3	-6	0	-1	-2	-1	-1	0	-3	
-4	-5	-5	-6	-6	-4	-4	0	-1	-2	-3	-2	-3		
-4	-5	-6	-9	-1	-1	-4	-6	-1	-1	-4	-6			

Déviati6n Totale



Déviati6n individuelle



THG: Abaissement général de la sensibilité
VFI: 98%
MD24-2: -4.99 dB P < 0.5%
PSD24-2: 1.52 dB

:: P < 5%
: P < 2%
: P < 1%
■ P < 0.5%

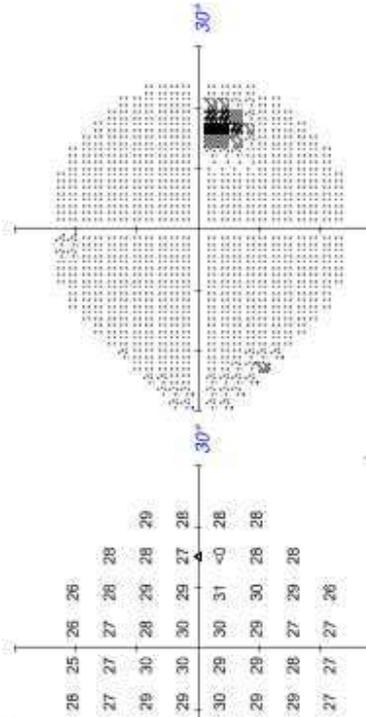
Pertes de fixation:
Erreurs faux pos.:
Erreurs faux nég.:
Durée du test:
Fovéa:

4/14 XX
0%
3%
05:28
38 dB

Stratégie:
Diam. pupille:
Acuité visuelle:
Rx: +0.75 DS -1.50 DC X 100

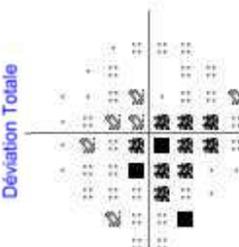
SITA Standard

Âge: 26

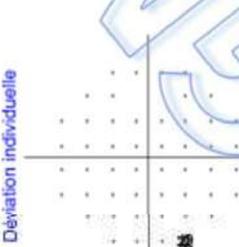


-2	-4	-3	-3	-4	-5	-4	-3	-2	-1	0	0				
-4	-4	-5	-4	-3	-2	-1	0	0	0	0	0				
-5	-4	-4	-3	-5	-4	-4	-2	-2	-1	0	-1	-1			
-5	-4	-3	-5	-4	-4	-4	-4	-3	-1	0	-2	-1	-1	-1	
-7	-4	-5	-4	-6	-5	-3	-3	-4	-1	-2	-1	-3	-2	0	0
-11	-3	-4	-5	-5	-3	-4	-3	-8	0	-2	-2	0	-1	0	
-3	-3	-5	-6	-3	-3	0	0	-2	-3	0	-1	-2			
-3	-4	-4	-5	-3	-4	-5	0	-1	-1	-2					

Déviati6n Totale



Déviati6n individuelle



THG: Abaissement général de la sensibilité
VFI: 100%
MD24-2: 4.04 dB P < 1%
PSD24-2: 1.31 dB

:: P < 5%
: P < 2%
: P < 1%
■ P < 0.5%

Merci

Dr Desbois, Dr Maestri
Congrès C 3 - Pitié Salpêtrière
25/11/2022



**SORBONNE
UNIVERSITÉ**



HÔPITAUX UNIVERSITAIRES
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